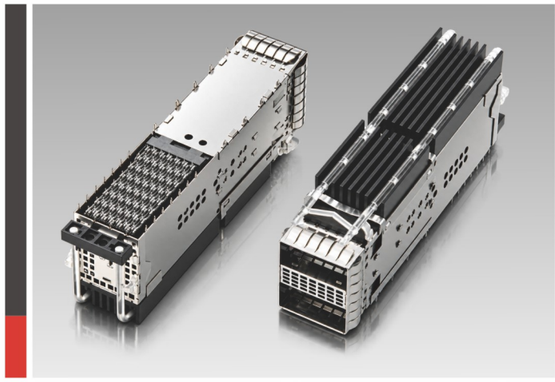
Scan to Visit
DELEC's Official
Website

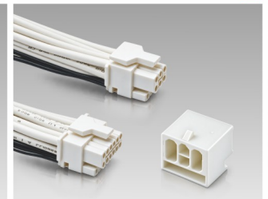
Email: sales@delec.com.cn
Website: www.delec.com.cn
China Site: www.delec.cn

DELEC®
Connectors













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In Producing Connectors and Cables



Our Goals

- Continue developing new and innovative designs across all product offerings.
- Maintain a people-oriented team with high integrity to support the company's growth.
- Provide excellent customer service and maintain long-term relationships with our customers.
- Further improve customer service through future ERP and CRM support.

Certification

IECQ ISO RBA

SGS UL

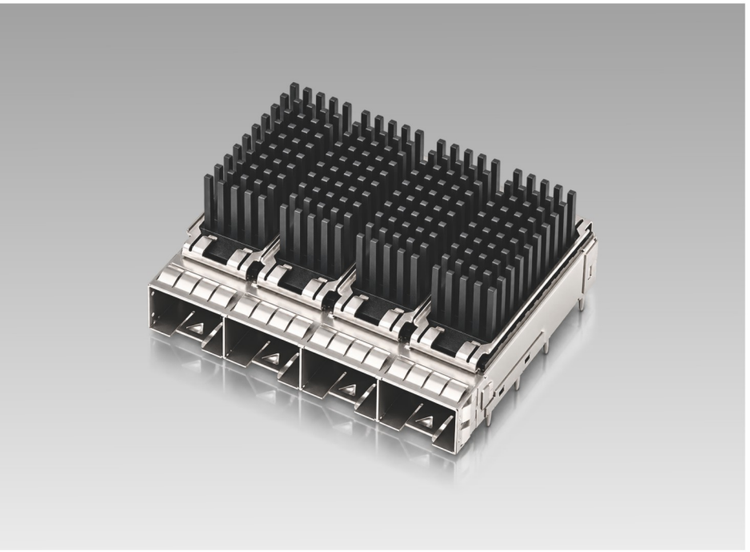
Brief introduction

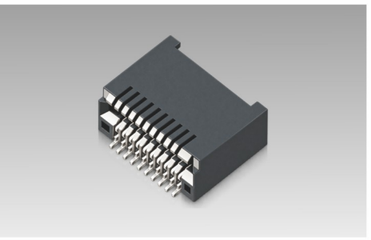
Established in December 1997, DELEC is a rapidly expanding company in the telecommunications and computer interconnect market. We produce a wide array of telecommunications jacks and computer connectors.

Quality is a core value of our company. We believe that quality drives our success and earns the support of our partners. As an ISO 9001-certified company, we maintain stringent standards for our products. With ISO 14001 certification, we take precautions to protect the environment. All our product lines also meet UL and cUL safety standards.

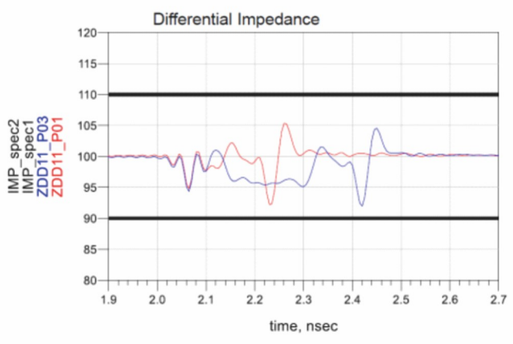
We have developed innovative designs for a variety of integrated network interface modules that vary in application. Our latest series of interface modules include increases in density and reductions in modular components, delivering greater value to customers. Our design efforts in 10BASE-T, 10/100BASE-TX, Gigabit magnetic components, and RJ45 metal shield covers have been widely accepted and have become industry standards.

Single & Rows SFP+, SFP56 Cage/Connector









Specification Highlights

The interconnect system comprises a cage assembly used with 20-position SFP connectors that comply with MSA INF-8074i and standards SFF-8081, SFF-8083, SFF-8432, and SFF-8433.

Configurations (Rows x Ports per Row)

1. 1x1 ,1x2 ,1x4 ,1x6
2. 2x1, 2x2, 2x3, 2x4, 2x6, 2x8 ,2x12

General Characteristics

1. RoHS Compliant
2. Industry-Standard Footprint
3. Meets EIA-364 Industry Standards

Mechanical Characteristics

1. Compliant Press-Fit Pins or Solder Tails (Single Ports)
2. Durability: 250 mating cycles min.

Electrical Characteristics

1. Hot-Swappable
2. Operating Voltage: 3.3 V
3. Operating Current: 0.5 A
4. Differential Impedance: 100 Ω ± 10 Ω
5. DWV: 300 VAC
6. Insulation Resistance: 1,000 MΩ min.
7. Contact Resistance: 70 mΩ max.

Materials

1. Cage

Base Material: Copper Alloy

Light Pipe: Optical Grade Polycarbonate

Heat Sink: Aluminum Alloy

Heat Sink Clip: Stainless Steel

Dust Cover: Thermoplastic

EMI Ground Tabs: Stainless Steel

2. Connector

Contact Base Material: Copper Alloy

Contact Plating: Gold on Mating Area, Gold or Matte Tin on Termination

Housing: Glass Reinforced, Lead-Free Solder Reflow Process Compatible Thermoplastic,

UL94 V-0 Rated

Temperature Rating

1. Operating Temperature: –40 °C to +85 °C
2. Storage Temperature: –55 °C to +105 °C

Options

1. Dust Cover
2. Light Pipe (Inner or Outer)
3. Heat Sink
4. EMI Spring Fingers

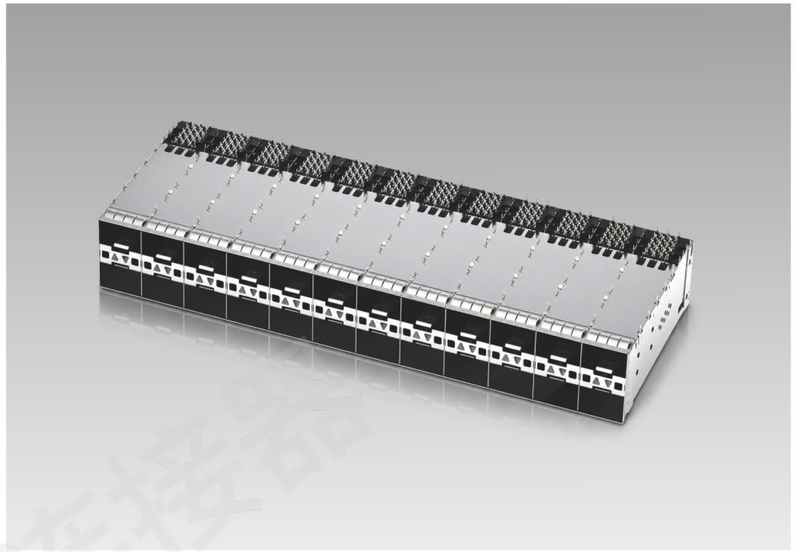
Metal Spring Fingers

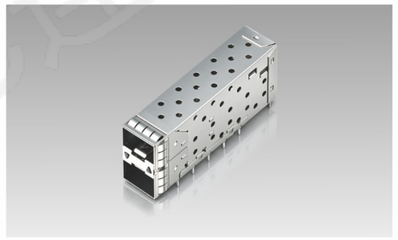
Conductive Elastomeric Gasket

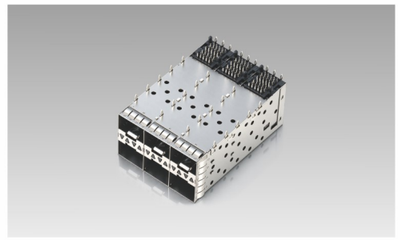
Packaging

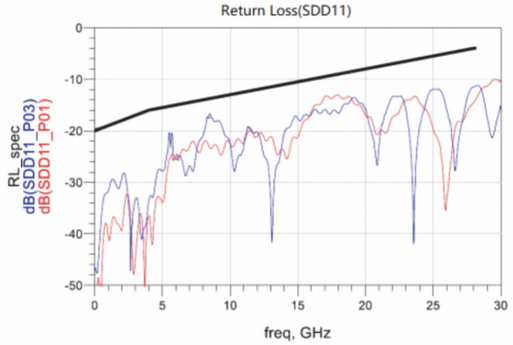
1. Tray Packaging: Cage and Connector Assembly
2. Bulk Packaging: Dust Cover

Stacked, SFP+, SFP56 Connector









Specification Highlights

The interconnect system comprises a cage assembly used with 20-position SFP connectors that comply with MSA INF-8074i and standards SFF-8081, SFF-8083, SFF-8432, and SFF-8433.

Configurations (Rows x Ports per Row)

1. 1x1 1x2 1x4 1x6
2. 2x1 2x2 2x3 2x4 2x6 2x8 2x12

General Characteristics

1. RoHS Compliant
2. Industry Standard Footprint
3. Industry Standard EIA-364

Mechanical Characteristics

1. Compliant Press-Fit Pins or Solder Tails（Single Ports）
2. Durability: 250 mating cycles min.

Electrical Characteristics

1. Hot Swappable
2. Operating Voltage: 3.3 V
3. Operating Current: 0.5 A
4. Differential Impedance: 100 Ω ± 10 Ω
5. DWV: 300 VAC
6. Insulation Resistance: 1,000 MΩ min.
7. Contact Resistance: 70 mΩ max.

Materials

1. Cage

Base Material: Copper Alloy

Light Pipe: Optical Grade Polycarbonate

Heat Sink: Aluminum Alloy

Heat Sink Clip: Stainless Steel

Dust Cover: Thermoplastic

EMI Ground Tabs: Stainless Steel

2. Connector

Contact Base Material: Copper Alloy

Contact Plating: Gold on Mating Area, Gold or Matte Tin on Termination

Housing: Glass Reinforced, Lead-Free Solder Reflow Process Compatible Thermoplastic,

Ul94 V-0 Rated

Temperature Rating

1. Operating Temperature: –40 °C to +85 °C
2. Storage Temperature: –55 °C to +105 °C

Options

1. Dust Cover
2. Light Pipe (Inner or Outer)
3. Heat Sink
4. EMI Spring Fingers

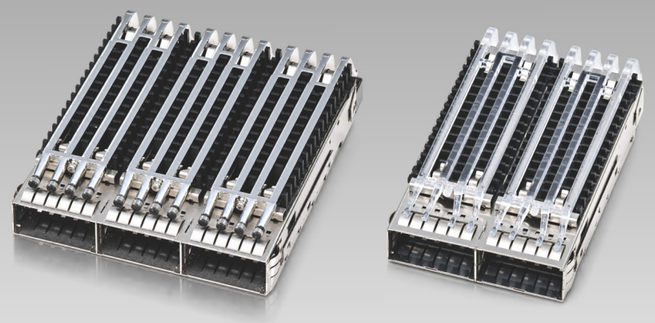
Metal Spring Fingers

Conductive Elastomeric Gasket

Packaging

1. Tray Packaging: Cage and Connector Assembly
2. Bulk Packaging: Dust Cover

Single & Rows QSFP+,QSFP56 1×N Cage







Specification Highlights

The interconnect system comprises a cage assembly used with 38-position QSFP connectors that comply with standards SFF-8682, SFF-8672, SFF-8683, SFF-8662, and SFF-8663.

Configurations (Rows x Ports per Row)

1. 1x1 1x2 1x3 1x4

General Characteristics

1. RoHS Compliant
2. Industry Standard Footprint
3. Industry Standard EIA-364

Mechanical Characteristics

1. Compliant Press-Fit Pins or Solder Tails（Single Ports）
2. Durability: 250 mating cycles min.

Electrical Characteristics

1. Hot Swappable
2. Operating Voltage: 30 VDC per contact
3. Operating Current: 0.5 A
4. Differential Impedance: 100 Ω ± 10 Ω
5. DWV: 300 VAC
6. Insulation Resistance: 1,000 MΩ min.
7. Contact Resistance: 70 mΩ max.

Temperature Rating

1. Operating Temperature: –40 °C to +85 °C
2. Storage Temperature: –55 °C to +105 °C

Options

1. Dust Cover
2. Light Pipe (Inner or Outer)
3. Heat Sink
4. EMI Spring Fingers

Metal Spring Fingers

Conductive Elastomeric Gasket

Packaging

1. Tray Packaging: Cage and Connector Assembly
2. Bulk Packaging: Dust Cover

Materials

1. Cage

Base Material: Copper Alloy

Light Pipe: Optical Grade Polycarbonate

Heat Sink: Aluminum Alloy

Heat Sink Clip: Stainless Steel

Dust Cover: Thermoplastic

EMI Ground Tabs: Stainless Steel

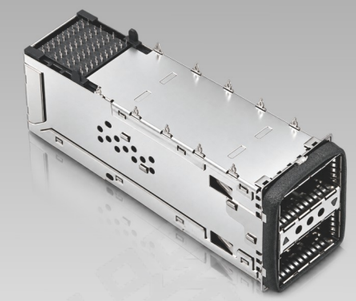
2. Connector

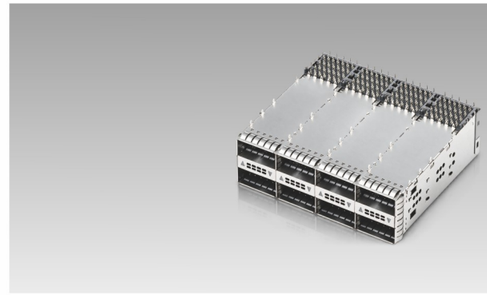
Contact Base Material: Copper Alloy

Contact Plating: Gold on Mating Area, Gold or Matte Tin on Termination

Housings: Glass Reinforced, Lead-Free Solder Reflow Process Compatible Thermoplastic, UL94 V-0 Rated

Single & Stacked QSFP+,QSFP56 Connector









Specification Highlights

The interconnect system comprises a cage assembly used with 38-position QSFP connectors that comply with standards SFF-8682, SFF-8672, SFF-8683, SFF-8662, and SFF-8663.

Configurations (Rows x Ports per Row)

1. 2x1 2x2 2x3 2x4

General Characteristics

1. RoHS Compliant
2. Industry Standard Footprint
3. Industry Standard EIA-364

Mechanical Characteristics

1. Compliant Press-Fit Pins or Solder Tails（Single Ports）
2. Durability: 250 mating cycles min.

Electrical Characteristics

1. Hot Swappable
2. Operating Voltage: 30 VDC per contact
3. Operating Current: 0.5 A
4. Differential Impedance: 100 Ω ± 10 Ω
5. DWV: 300 VAC
6. Insulation Resistance: 1,000 MΩ min.

7. Contact Resistance: 70 mΩ max.

Materials

1. Cage

Base Material: Copper Alloy

Light Pipe: Optical Grade Polycarbonate

Heat Sink: Aluminum Alloy

Heat Sink Clip: Stainless Steel

Dust Cover: Thermoplastic

EMI Ground Tabs: Stainless Steel

2. Connector

Contact Base Material: Copper Alloy

Contact Plating: Gold on Mating Area, Gold or Matte Tin on Termination

Housing: Glass Reinforced, Lead-Free Solder Reflow Process Compatible Thermoplastic,

Ul94 V-0 Rated

Temperature Rating

1. Operating Temperature: –40 °C to +85 °C
2. Storage Temperature: –55 °C to +105 °C

Options

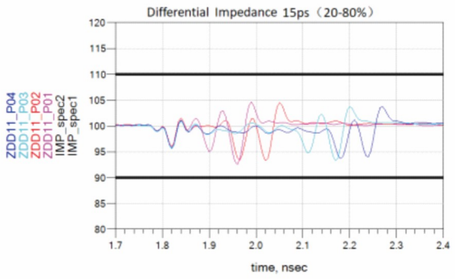
1. Dust Cover
2. Light Pipe (Inner or Outer)
3. Heat Sink
4. EMI Spring Fingers

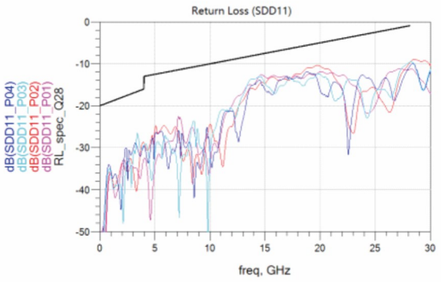
Metal Spring Fingers

Conductive Elastomeric Gasket

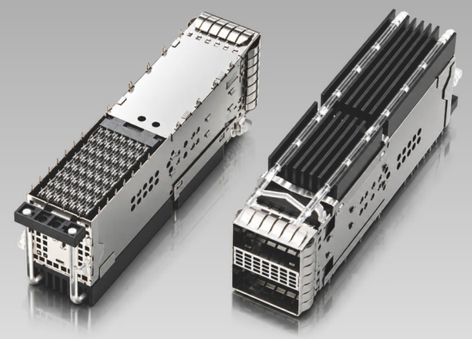
Packaging

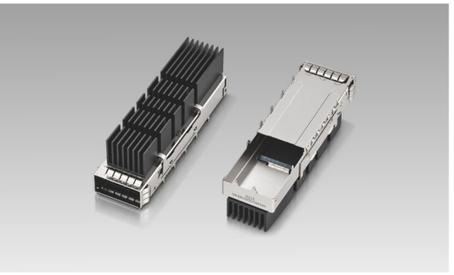
1. Tray Packaging: Cage and Connector Assembly
2. Bulk Packaging: Dust Cover





Single & Stacked SFP-DD,QSFP-DD Connector



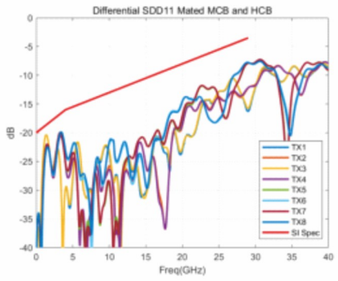


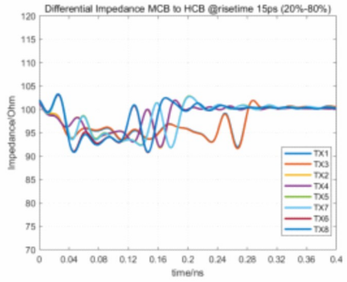




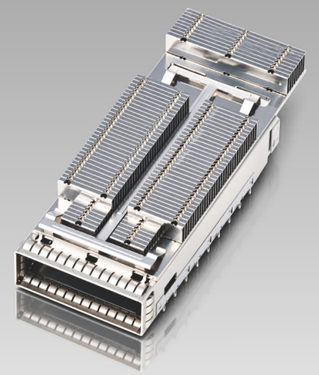
Specification Highlights
Complies with the SFP-DD MSA
and INF-8628.
Configurations (Rows x Ports per Row)
1. 1x1
2. 2x1
General Characteristics
1. RoHS Compliant
2. Industry Standard Footprint
3. Industry Standard EIA-364
Mechanical Characteristics
1. Compliant Press-Fit Pins or Solder Tails（Single Ports）
2. Durability: 250 mating cycles min.
Electrical Characteristics
1. Hot Swappable
2. Operating Voltage: 30 VDC per contact
3. Operating Current: 0.5 A
4. Differential Impedance: 100 Ω ± 10 Ω
5. DWV: 300 VAC
6. Insulation Resistance: 1,000 MΩ min.
7. Contact Resistance: 70 mΩ max.

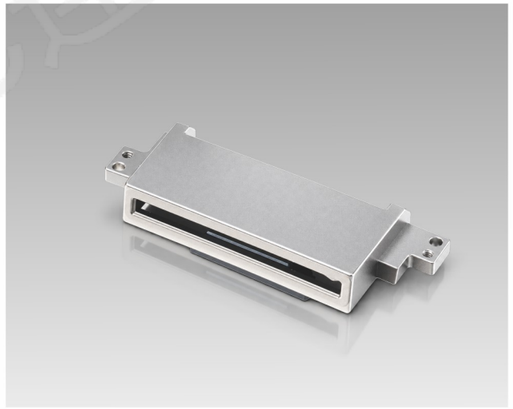
Materials
1. Cage
Base Material: Copper Alloy
Light Pipe: Optical Grade Polycarbonate
Heat Sink: Aluminum Alloy
Heat Sink Clip: Stainless Steel
Dust Cover: Thermoplastic
EMI Ground Tabs: Stainless Steel

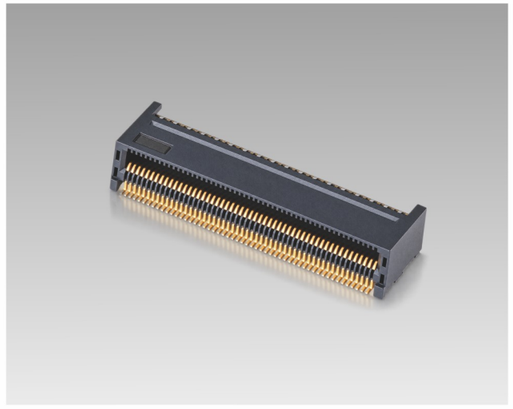




Single & Rows CFP2 Cage/Connector







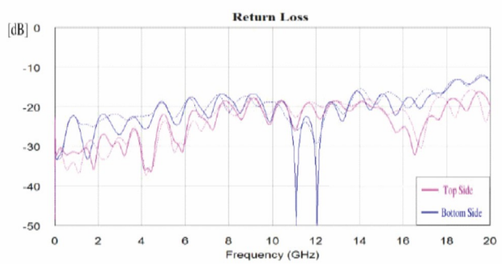
Material
1. Housing: Black color, Glass reinforced, Lead Free Solder Reflow Process Compatible Thermoplastic
2. Contacts Base Material: Phosphor Bronze
3. Plating Solder Tails: Matte tin
4. Plating Mating Area: Gold
5. Resonance Dampening Feature: Conductive Polymer

Mechanical Performance
1. Durability: 200 mating cycles
2. Mating Force: 80 N max.
3. Contact Normal Force: 30 grams
4. PCB Thickness (Cage): 3.00 mm (0.118 in.)
5. Unmating Force (Cage): 50 N

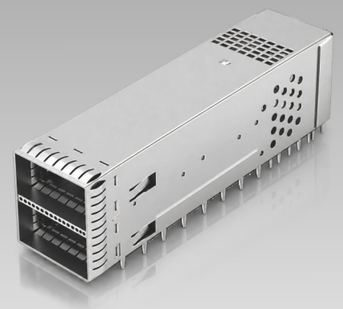
Electrical Performance
1. Operating Voltage: 3.3 V DC per contact
(Class 4 or lower)/1.25 A maximum (Classes 5 and 6)
2. Operating Current (per signal pin): 0.5 A maximum

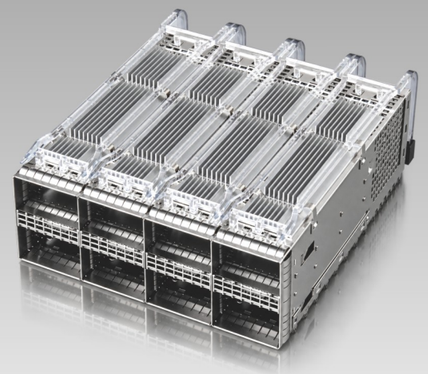
Environmental
1. Operating and Storage Temperature: –40 °C to +85 °C
2. RoHS

Tooling Information
Configurations: 1X1



Single & Stacked OSFP Connector





Material
1. Housing: Black color, Glass reinforced, Lead Free
Solder Reflow Process Compatible Thermoplastic
2. Contacts Base Material: Phosphor Bronze
3. Plating Solder Tails: Matte tin over Nickel
4. Plating Mating Area: Gold
5. Resonance Dampening Feature: Carbon fiber reinforced

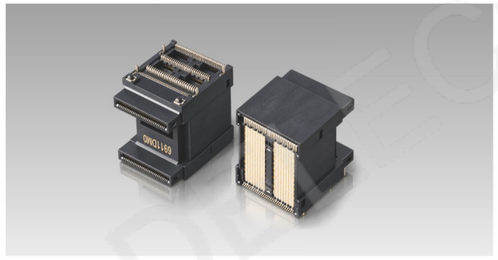
Mechanical Performance
1. Durability: 250 mating cycles
2. Mating Force: 40 N max.
3. Unmating Force: 40 N max.
4. Contact Normal Force: 40 grams min.

Electrical Performance
1. Operating Voltage: 30 VDC per contact
2. Operating Current:
3. 0.5 A per signal contact
4. 1.5 A per low speed power contact
5. Differential Impedance: 100Ω ± 10Ω

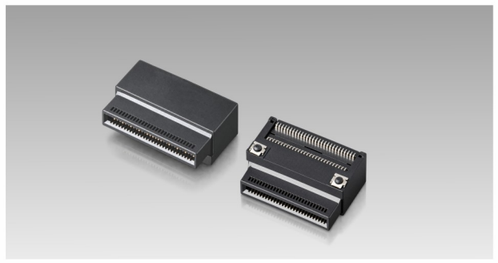
Environmental
1. Operating and Storage Temperature: –20 °C to +85 °C
2. RoHS & Halogen-Free

Tooling Information
1. Configurations:
1x1
2x1

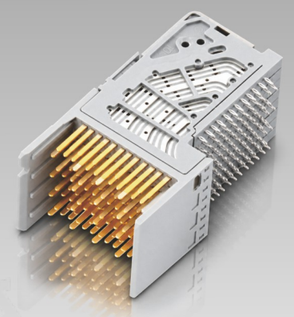
Packaging
Tape and Reel or Tray

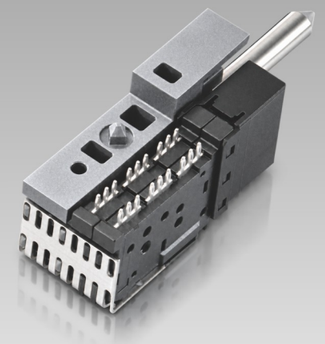






High Speed Backplane Connector





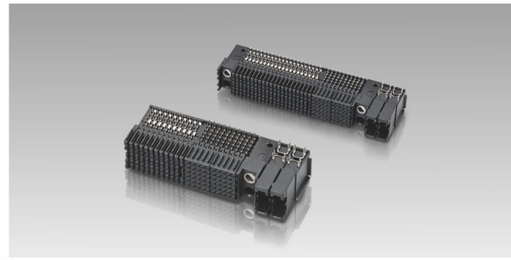
High Speed Backplane Connector

Material
Signal Contact: Copper Alloy
Ground Contact: Copper Alloy
Housing: Liquid Crystal Polymer UL 94 V-0
Plating: 30" Ni
Compliant Pin Plating: RoHS

Feature
Temperature Range: –65 °C to 90 °C
Current Rating: 0.5 A/contact at <30 °C
Durability: 200 cycles
Voltage: 560 VAC
Operating Voltage: 250 VAC

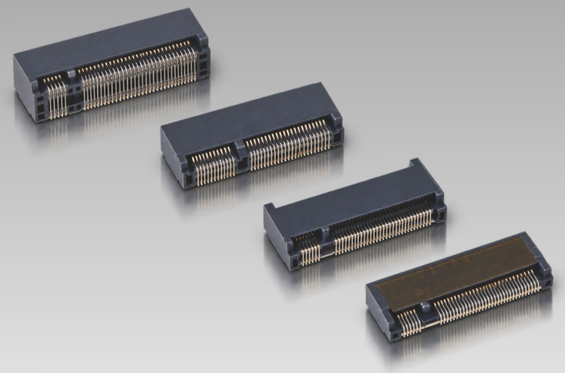
Signal
Impedance: Differential @100 Ω ± 10%
Crosstalk: Multi-pair Differential crosstalk 2.1% @50ps
Insertion Loss: –2 dB at 10 GHz

Specification
10+ Gbps performance
100 Ω impedance
max. 66 differential pairs/inch
50 Gbps @IB HDR
56.1 Gbps @128GFC





Card Edge Product Family: M.2



Mechanical Performance

1. Insertion force (module to connector): 25 N max.
2. Terminal retention force: 100 gf min.
3. Durability: 25cycles

Electrical Performance

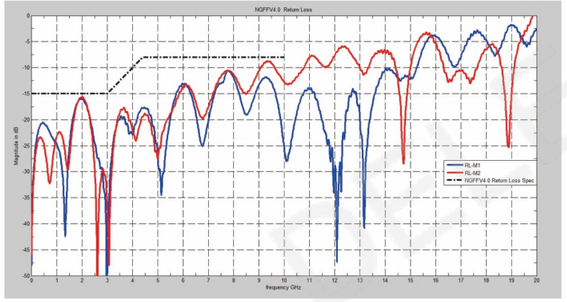
1. Low level contact resistance: 55mΩ initial, △20mΩ
2. Insulation resistance: 100 MΩ min.
3. Dielectric withstanding voltage: 300 VAC.
4. Current rating: 0.5 A/pin De-rate

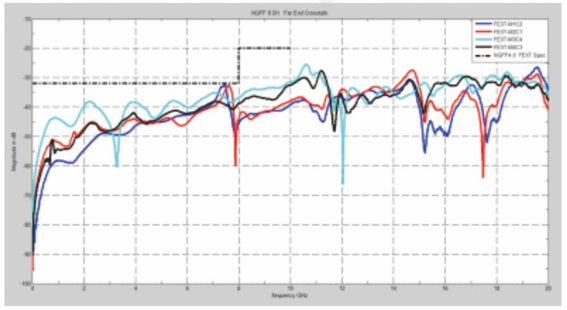
Environmental

1. Flammability: UL 94 V-0
2. Low halogen: 1000ppm max. Cl, 1000ppm max. Br.
3. Compliant with RoHS directive 2011/65/EU
4. Operating Temperature: –40 ℃ to +80 ℃

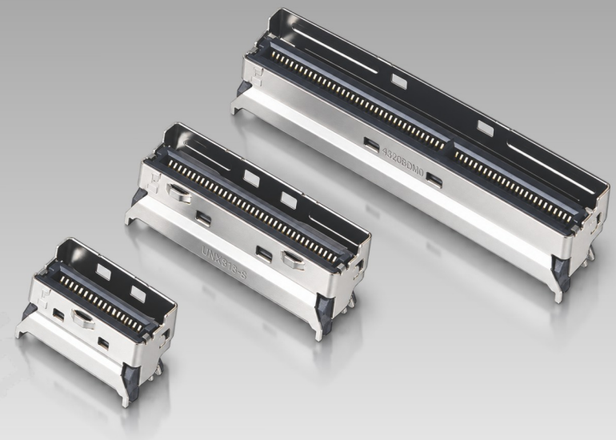
Specification

1. PCI Express M.2 SPEC:
2. DELEC PRODUCT SPEC: DE-PS-0024





Internal High speed IO Series: MCIO (4X/8X/16X)



Mechanical Performance

1. Insertion force: 1.15 N/Pair max.
2. Unmating force: 0.10 N/Pair min.
3. Terminal retention force: 200 gf min.

Electrical Performance

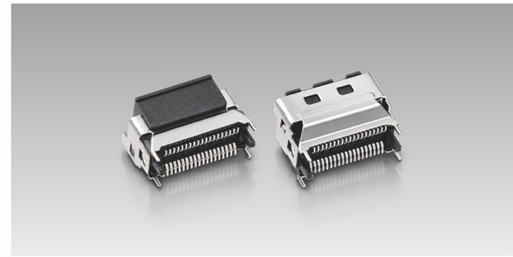
1. Low level contact resistance: 20mΩ initial, △10mΩ
2. Insulation resistance: 1000 MΩ min.
3. Dielectric withstanding voltage: 300 VAC.
4. Current rating: 1.0 A/pin De-rate

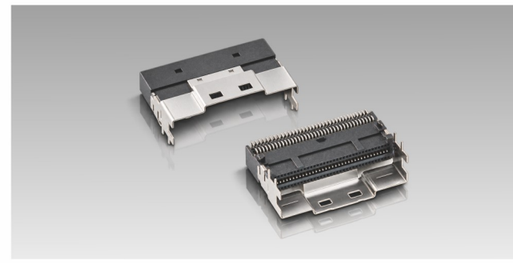
Environmental

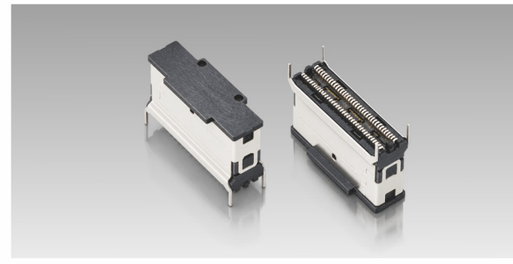
1. Flammability: UL 94 V-0
2. Low halogen: 1000ppm max. Cl, 1000ppm max. Br.
3. Compliant with RoHS directive 2011/65/EU
4. Operating Temperature: –55 ℃ to +85 ℃

Specification

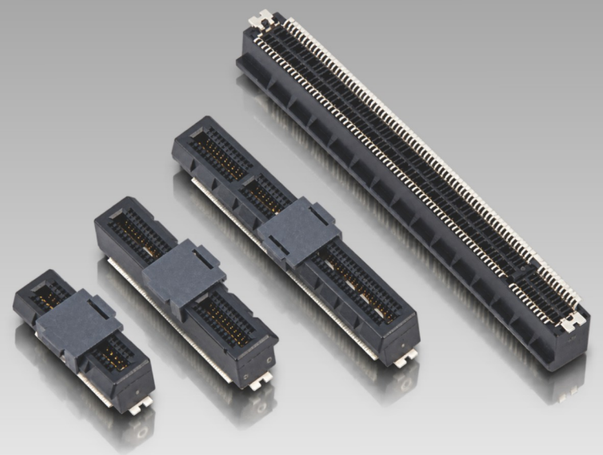
1. DELEC SPEC:
Industry specification SFF-TA-1016
2. DELEC PRODUCT SPEC:
DE-PS-0088







Card Edge Product Family: PCI Express5.0 (X1/X4/X8/X16)



Mechanical Performance

1. Insertion force (module to connector): 1.15 N/Pair max.
2. Unmating force: 0.15 N/Pair min.
3. Terminal retention force: 200 gf min.
4. Durability: 50cycles.

Electrical Performance

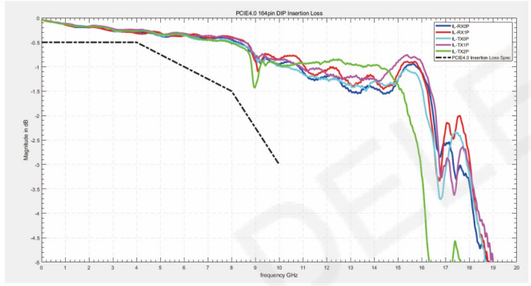
1. Low level contact resistance: 30mΩ initial, △10mΩ
2. Insulation resistance: 1000 MΩ min.
3. Dielectric withstanding voltage: 500 VAC.
4. Current rating: 1.0 A/pin De-rate

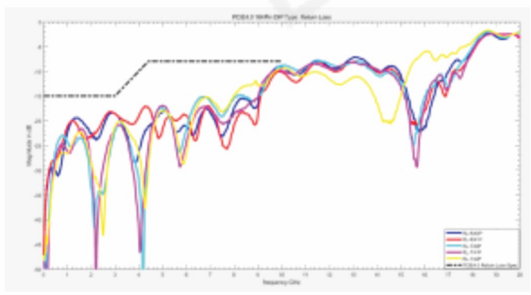
Environmental

1. Flammability: UL 94 V-0
2. Low halogen: 1000ppm max. Cl, 1000ppm max. Br.
3. Compliant with RoHS directive 2011/65/EU
4. Operating Temperature: –40 °C to +85 °C

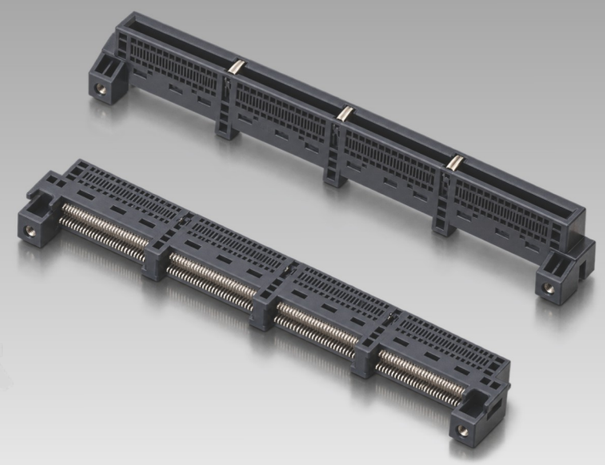
Specification

1. PCI Express card electromechanical specification
2. DELEC PRODUCT SPEC:
DE-PS-0088





Card Edge Product Family: SLIVER 224CKTS STRADDLE MOUNT



Mechanical Performance

1. Insertion force (AIC to connector): 1.1 N/pair max.
2. Unmating force: 0.1 N/pair min.
3. Durability: 25cycles.

Electrical Performance

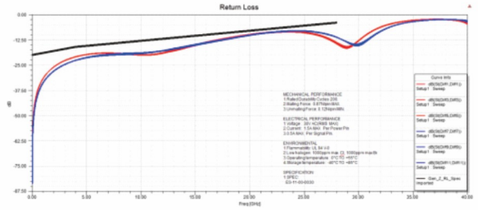
1. Low level contact resistance: 30mΩ initial, △15mΩ
2. Insulation resistance: 100MΩ min.
3. Dielectric withstanding voltage: 300 VAC.
4. Current rating: 1.1 A/pin De-rate

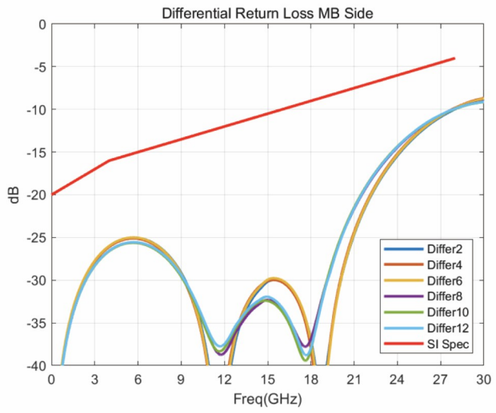
Environmental

1. Flammability: UL 94 V-0
2. Low halogen: 1000ppm max. Cl, 1000ppm max. Br.
3. Compliant with RoHS directive 2011/65/EU
4. Operating Temperature: –55 °C to +85 °C
5. Thermal Shock: 5 cycles between –55 °C and +85 °C
6. Temperature life: 105 °C for 168 hours.

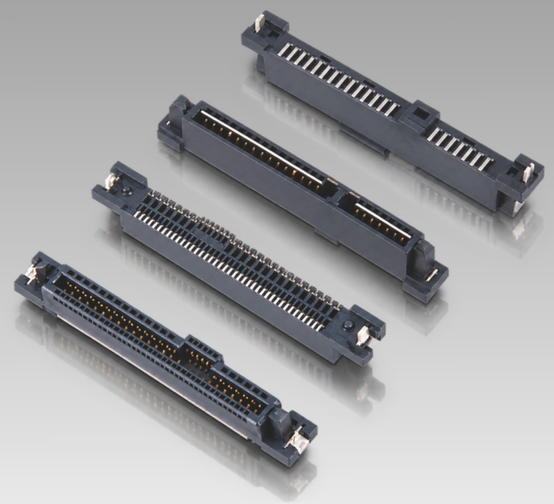
Specification

1. SPEC:
SFF-TA-1002





U.3 Connector (SAS 3.0 7+15PIN/SAS 3.0/SAS 4.0/SAS 5.0)



Mechanical Performance

1. Rated Durability Cycles 200.
2. Mating Force: 0.87 N/pin max.
3. Unmating Force: 0.12 N/pin min.

Electrical Performance

1. Voltage: 30 V AC (RMS max.)
2. Current: 1.5 A max. per power pin, 0.5 A max. per signal pin.

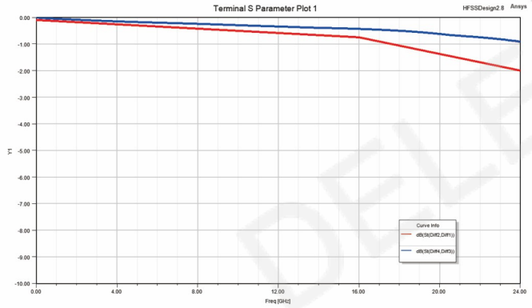
Environmental

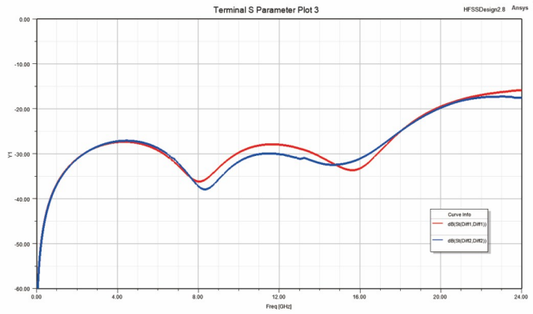
1. Flammability: UL 94 V-0
2. Low halogen: 1000ppm max. Cl, 1000ppm max. Br.
3. Operating Temperature: 0 ℃ to +55 ℃
4. Storage Temperature: –40 ℃ to +85 ℃

Specification

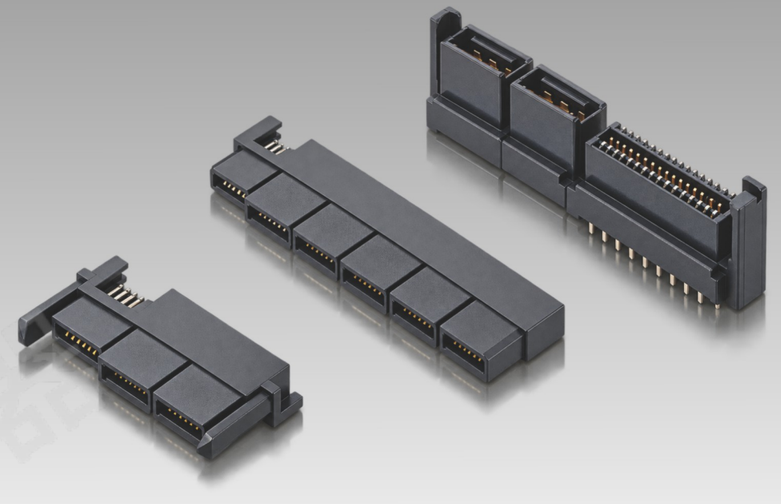
1. SPEC:

ES-11-00-0030





EXTreme LPHPower Connector/Hybrid Right-Angle Receptacles



Mechanical Performance

1. Mating Force (max. per circuit):
Power Contacts - 6.87 N (1.54 lb.)
Signal Contacts - 1.08 N (0.24 lb.)
2. Unmating Force (min. per circuit):
Power Contacts - 1.47 N (0.33 lb.)
Signal Contacts - 0.15 N (0.03 lb.)
3. Durability: 250 cycles (receptacle and plug)

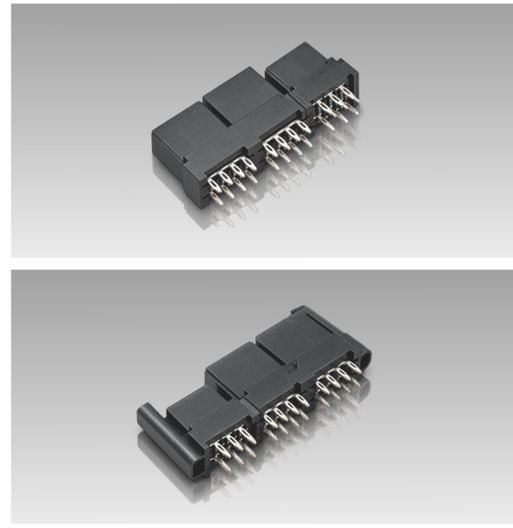
Electrical Performance

1. Voltage: 250 V max.
2. Current (at a 30 ℃ temperature rise):
Power: 30.0 A max.
Signal: 1.0 A max.
3. Contact Resistance (per contact):
Power: 0.11 mΩ min., 0.02 mΩ max.
Signal: 0.35 mΩ min., 0.47 mΩ max.
4. Dielectric Withstanding Voltage: 1,500 V
5. Insulation Resistance (min.): 5,000 MΩ
6. Current interruption:
Power - 30.0 A and 48 V DC
Signal - 1.0 A at 30 V

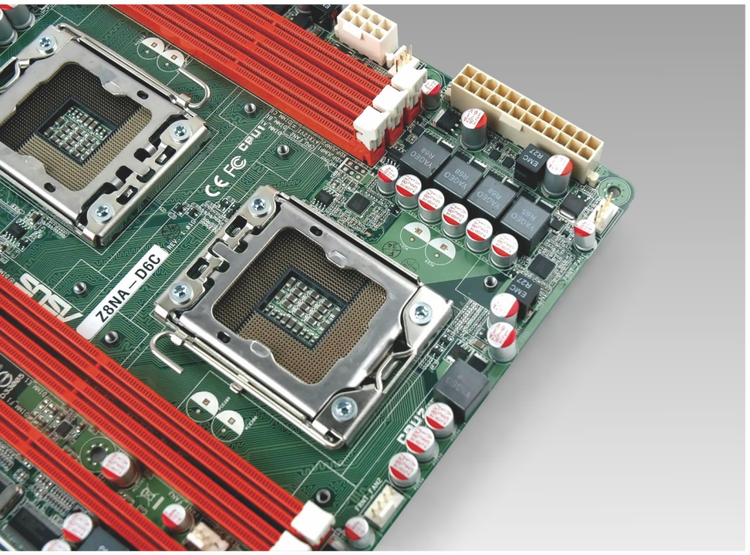
Physical

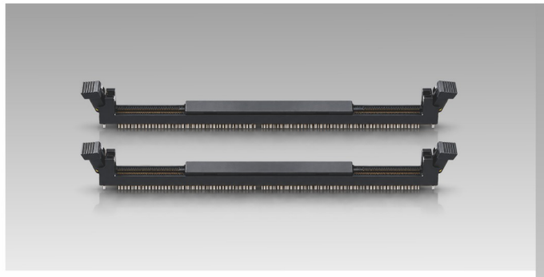
1. Housing: LCP
2. Contact:
Power Contacts -Copper (Cu) alloy
Signal Contacts-Copper (Cu) Alloy
3. Plating:
Contact Area-Select Gold Solder Tail Area - Tin Underplating-Nickel
Flammability Rating: UL 94 V-0
Operating Temperature: –40 ℃ to +105 ℃

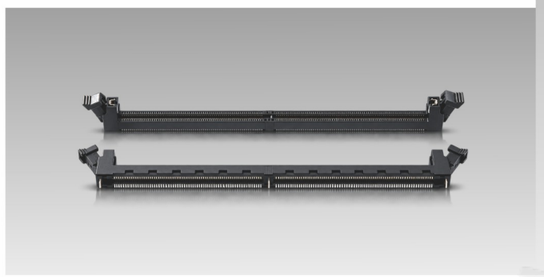




Card Edge Product Family: DDR DIMM/DDR SO DIMM







Mechanical Performance

1. Insertion force (module to connector): 106.8 N max.
2. Terminal retention force: 300 gf min.
3. Durability: 25cycles.

Electrical Performance

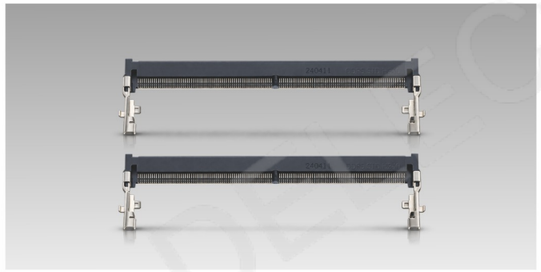
1. Low level contact resistance: 10mΩ initial, △10mΩ
2. Insulation resistance: 1 MΩ min.
3. Dielectric withstanding voltage: 250 VAC.
4. Current rating: 0.75 A/pin De-rate

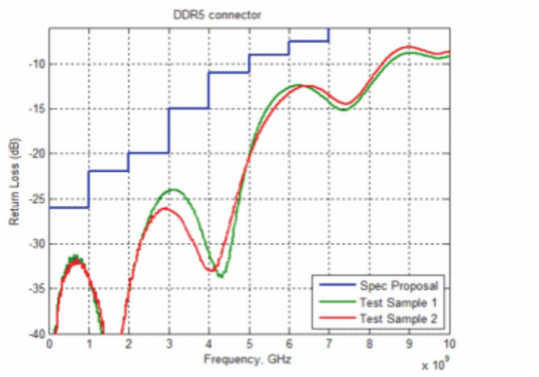
Environmental

1. Flammability: UL 94 V-0
2. Low halogen: 1000ppm max. Cl, 1000ppm max. Br.
3. Compliant with RoHS directive 2011/65/EU
4. Operating Temperature: –55 ℃ to +85 ℃

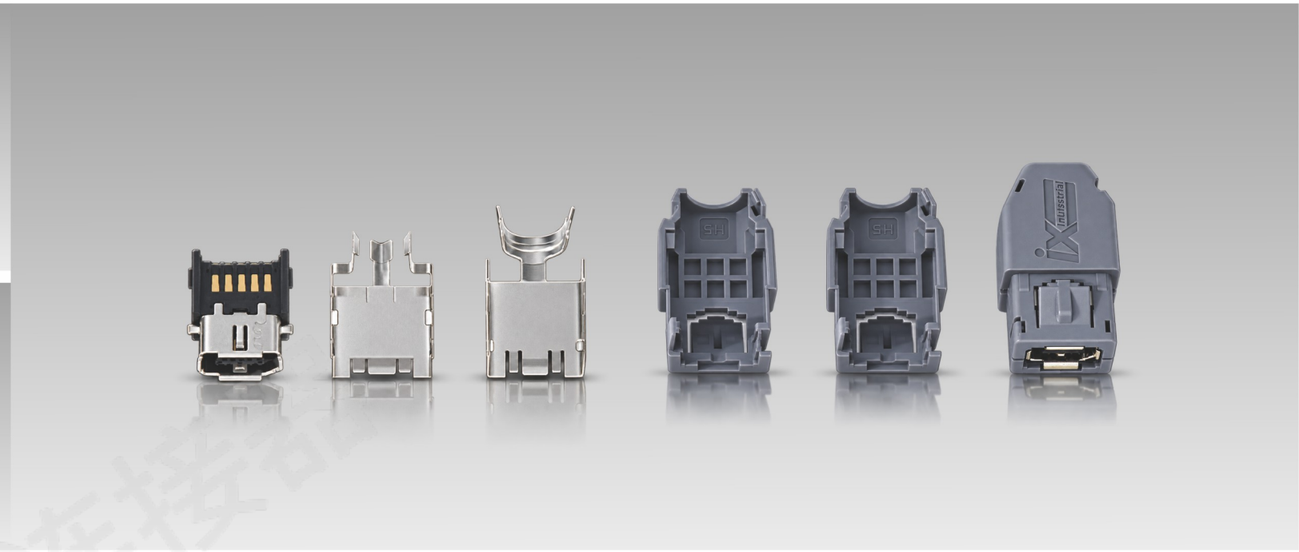
Specification

1. DELEC SPEC:
DDR4 288pin: SO-016 (DIP), SO-018(SMT)
/MO-309 (Module)
DDR5 288pin: SO-023/MO-369
2. DELEC PRODUCT SPEC:
DDR4: DE-PS-0046
DDR5: DE-PS-0115





IX Series Connector (Industrial Transmission connector)

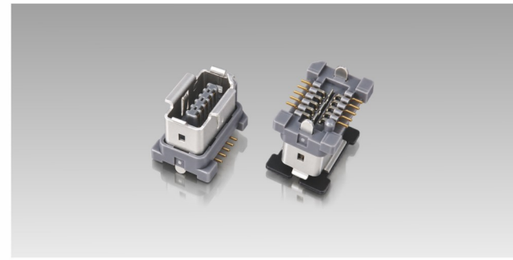


Material

1. RoHS COMPLIANT PER EU DIRECTIVE 2011/65/EU AND AMENDMENTS.
2. STAINLESS STEEL, MATTE TIN OVER NICKEL PLATED.
3. INSERTS: HIGH TEMPERATURE RESISTANT ENGINEERING
THERMOPLASTIC, GLASS REINFORCED, UL94 V-0.
4. CONTACTS: COPPER ALLOY PLATED WITH GOLD OR PALLADIUM-NICKEL
(SEE ORDERING CODE)
OVER 1.27μm (50μ") MINIMUM NICKEL ON THE MATING AREA AND MATTE TIN OVER
NICKEL ON THE SMT TAILS. CODE 4 MATING AREA PLATING 1.27μm (50μ") GOLD
OPTION CONFORMS to ASTM B488, TYPE 2, CODE C, CLASS 1.25.
MID-PLATE: STAINLESS-STEEL

Specification

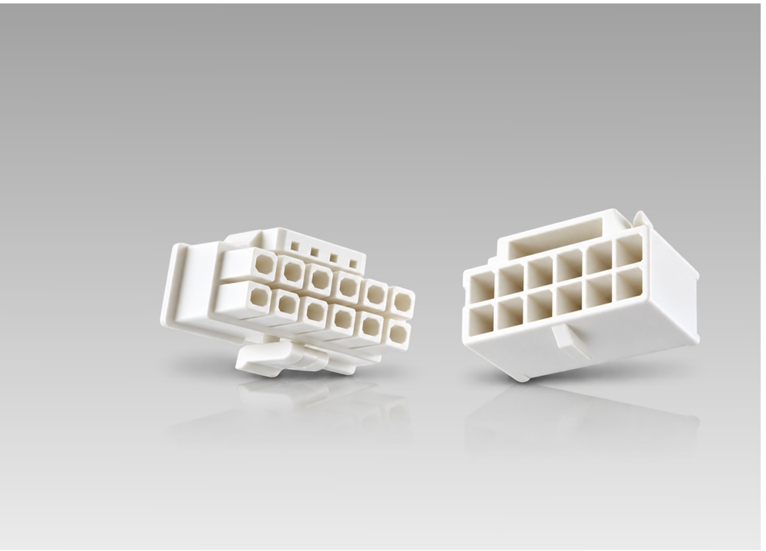
1. CONNECTORS ARE PROVIDED IN TAPE & REEL PACKAGING FOR PICK & PLACE
PROCESSING AND ARE SUITABLE FOR IR REFLOW SOLDERING OF PIN IN PASTE SHIELD
TAILS AND SURFACE MOUNT CONTACT TAILS.
2. DESIGNED to CONFORM to REQUIREMENTS OF IEC 61076 PART 3-124 SPECIFICATION.
THE A KEY FEATURE SHOWN IS INTENDED FOR USE WITH ETHERNET APPLICATIONS,
EITHER 10/100 MBit/S OR 1 to 10 GBit/S (CAT 5e, 6 & 6 A).
3. CURRENT RATING:
1.5 A PER POSITION (30° max. TEMPERATURE RISE PER UL1977 &
CSA C22.2 NO 182.3 STANDARDS) VOLTAGE RATING: 50 V AC rms OR 60 V DC
4. OPERATING TEMPERATURE -55° to +105 °C.
5. DIELECTRIC WITHSTANDING VOLTAGE: 500 V DC
6. CONTACT RESISTANCE: 30 mΩ MAXIMUM.
7. INSULATION RESISTANCE: 500 MΩ MINIMUM.
8. MATING & UNMATING FORCE: 25 N (5.6 lbf) MAXIMUM.







Micro-Fit+ System Connector

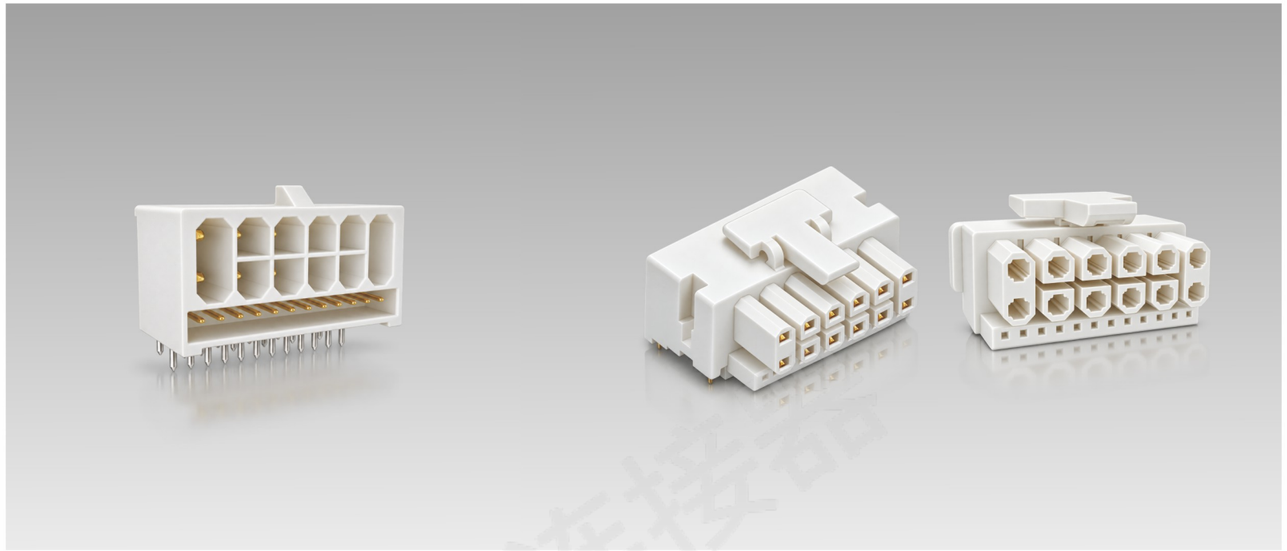


Micro-Fit+ OCP M-PIC 12 V (P12S12 + P6S6) Connectors

Reference Information
Packaging: Bag, tray, reel
File: CSA、UL
Use With:
Receptacle
Power Terminal
Signal terminal
Header
Mates With:
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes
Glow Wire Capable: Yes

Electrical
Power Contacts: 13.5 A per pin
Signal Contacts: 1.0 A per pin (same as existing Micro-Fit+ 12v-2x6)
Low Level Contact Resistance:
Power Terminal: 5 mΩ
Signal Terminal: 20 mΩ
Insulation Resistance (min.): 1,000 MΩ
Voltage (max.): 250 V AC/DC
Current (max.): 13.5 A (power)/1.0 A (signal)
Dielectric Withstand Voltage: 1,500 V AC
Temperature Rise: 30 °C
4 signal contacts rated to 1.0 A
Fully isolated terminals
Positive locking on housing with low thumb latch operation

Physical
Header: Liquid crystal polymer, UL 94 V-0, black
Header Pin: High copper alloy, tin plating
Receptacle: Nylon, UL 94 V-0, low halogen, black
Power Terminal: High-current copper alloy
Signal Terminal: Phosphorous bronze

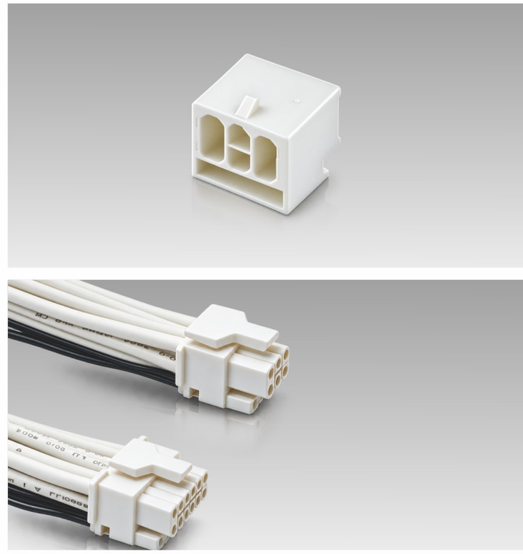


Micro-Fit+ PCIe 12 V-2x6 Connectors

Electrical
Power Terminal: 5 mΩ Signal Terminal: 20 mΩ
Insulation Resistance (min.): 1,000 MΩ
Voltage (max.): 600 V AC/DC
Current (max.): 9.5 A (Power)/1 A (Signal)
Dielectric Withstand Voltage: 1,500 V AC
Temperature Rise: 30 °C max.
Rated current up to 9.5 A per contact with all 12 power contacts energized
4 signal contacts rated to 1.0 A
Fully isolated terminals
Positive locking on housing with low thumb latch operation

Physical
Header: Liquid crystal polymer, UL 94 V-0, black
Header Pin: High copper alloy, tin plating
Receptacle: Nylon, UL 94 V-0, low halogen, black
Power Terminal: High-current copper alloy
Signal Terminal: Phosphorous bronze

OCP M-PIC Connector



OCP M-PIC CONNECTOR

The newly introduced PICPWR 2x6+12SB or 2x3+6SB auxiliary power connector and cable assembly supports power distribution of 864 W (2x6) or 486 W (2x3) within the HPM and between the HPM and peripheral subsystems. M-PIC connectors provide a hybrid power/signal solution for various server-system architectures, including Open Compute Project (OCP) Open Rack v3 and Modular Hardware Systems (DC-MHS).

1. Rated current up to 12 A for 2X6+12SB and 13.5 A for 2X3+6SB with all power contacts
2. Fully isolated terminals
3. Positive locking on housing with low thumb latch operation

Features
1. High current alloy material used for contacts
2. Fully isolated terminals
3. Positive locking on housing with low thumb latch operation
4. Fully polarized housing
5. High retention force in housing
6. UL 94 V-0 flammability rated Nylon material
7. RoHS compliant and lead-free

Benefits
1. Rated up to 12 A (2x6)/13.5 A (2x3) per contact with all contacts loaded
2. Prevents terminals from potential damage during operation
3. Ensures secured mating retention
4. Prevents accidental misseating
5. Well secured terminals in housing
6. High flammability rating
7. Meets environmental, health, and safety Requirements

Description
Dual Row Board Headers
PICPWR OCP® Right Angle header
PICPWR OCP® Vertical Header
Dual Row Board Receptacle
PICPWR OCP® Right Angle Board Receptacle with Latch
PICPWR OCP® Right Angle Board Receptacle Without Latch
Dual Row cable housings
Receptacle Housing
Terminals
Receptacle Terminal (Pwr)-16 AWG
Receptacle Terminal (Pwr)-14 AWG
Receptacle Terminal (Signal)

Technical Information

Material
1. Housing: LCP, Black (UL 94 V-0)
2. Signal Terminal: Copper Alloy with Nickel under plate and Gold plating
3. Power Terminal: Copper Alloy with Nickel under plate and Gold plating

Mechanical Performance- BTB Connectors
1. Insertion Force: 35 N max.
2. Withdrawal Force: 8 N min.
3. Durability: 30 mating cycles

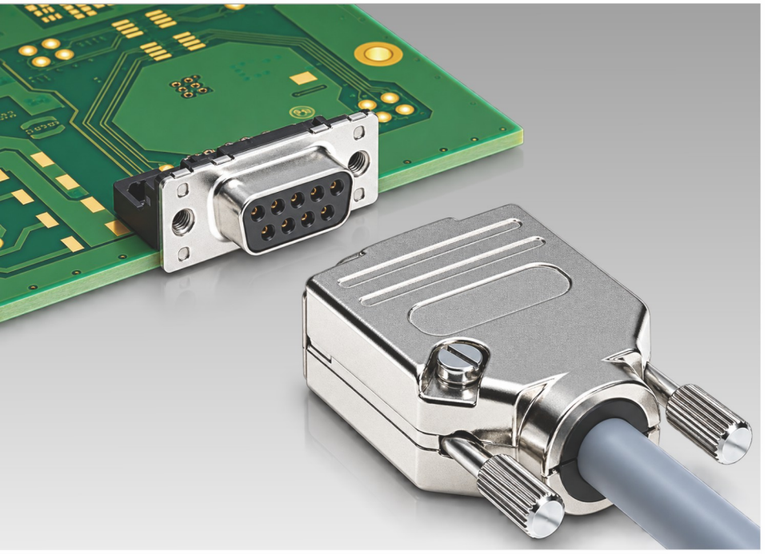
Packaging
1. PCB Header: Tray, Tape & Reel
2. Cable Housing: Bulk
3. Terminal: Reel

Mechanical Performance- WTB Connectors
1. Insertion Force PWR: 5.6 N max.
2. Insertion Force Side Band: Insertion force: 3.0 N max.
3. Withdrawal Force PWR: 1.5 N min.
4. Withdrawal Force Side Band: 0.2 N max.
5. Durability: 30 mating cycles
6. Wire Pullout Force: Refer to product specifications

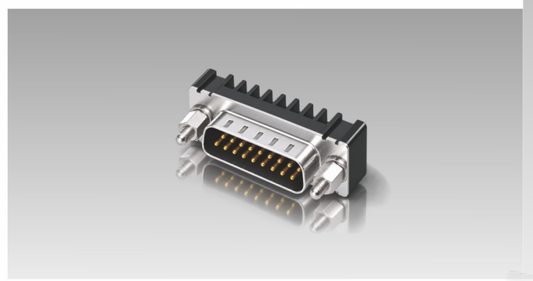
Electrical Performance
1. Low Level Contact Resistance:
PWR: 5 mΩ max.
Side Band: 10 mΩ max.
2. Insulation Resistance: 1000 MΩ min.
3. Voltage Rating PWR: 600 V AC/V DC
4. Voltage Rating Signal: 100 V AC/V DC
5. Current Rating: 12 A (2x6)/13.5 A (2x3)
6. Dielectric Withstand Voltage: 2200 V AC
7. Temperature Rise: 30 °C max.

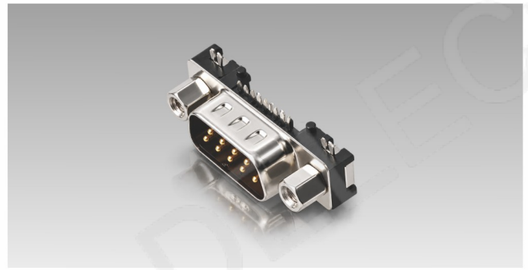
Environmental
1. Operating Temperature Range: -40 °C to +105 °C
2. Includes 30 °C terminal temperature rise at rated current

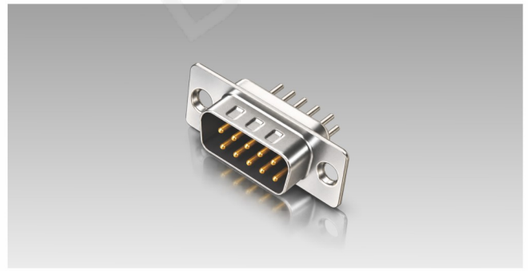
D-SUB Series Connector

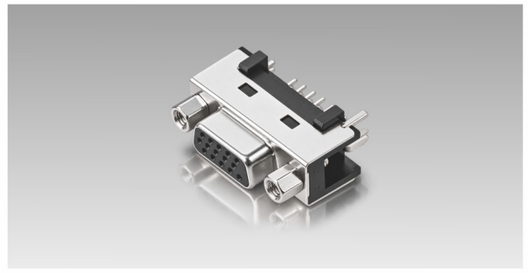












D-SUB Series

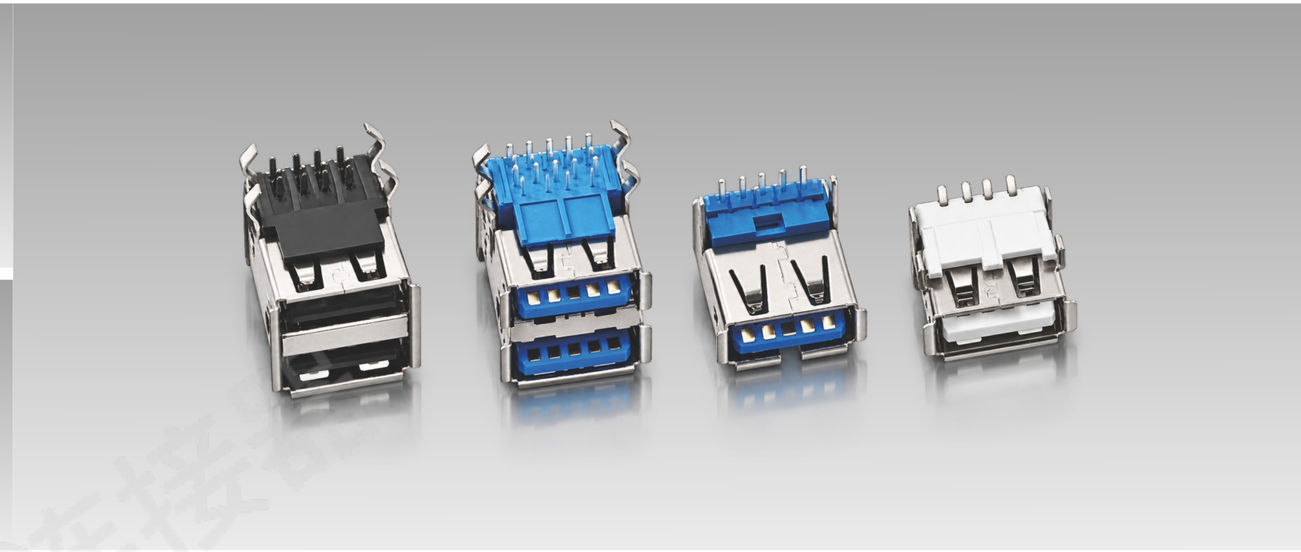
Materials

Insulator: high temperature thermoplastic, UL94 V-0 Blue
Contact terminal: 30 u " Au plated on contact area
50u"min. Matte Tin plated on solder area;
50u"min. Nickel underplating over all.
Crust: SPCC, plated Ni

Specifications

1. Electrical requirements:
Current rating: 1 A
Contact resistance: ≤30mΩ
Insulation resistance: ≥1000MΩ
Withstanding voltage: 500 Vr.m.s, 1mA, 60s
2. Mechanical requirements
Insertion force: ≤3.3 N/pin
Extraction force: ≥0.3 N/pin
Mechanical life: 200 cycles
3. Environment specification
Working Temperature: –40 °C to +100 °C
Humidity: ≤93% at 40 °C
4. Applicable standard: IEC60807
5. Storing:
Storage Condition: –10 °C to +40 °C
below 80% relative humidity
6. Helps prevent environmental pollution.
Complies with the European Union RoHS Directive.

USB & HDMI Series Connector



HDMI Series

Material

1. Housing: LCP + 30% glass fiber, UL 94 V-0, black
2. Contact: Copper alloy, Au- and Sn-plated.
3. Shell: SK7, Ni Plated.

Specifications

Mating Force: 44.1 N (4.5 kgf) max.
Unmating Force: 9.8–39.2 N (1–4 kg).
Durability: 10,000 cycles.

Electrical Characteristic

Current Rating: 0.5 A max.
Voltage Rating: 40 V AC max.
Contact Resistance: 30 mΩ max.
Insulation Resistance:
100 MΩ min. (unmated)
10 MΩ min. (mated)
Dielectric Withstanding Voltage:
500 V AC min.

Temperature
Operating Temperature: –40 °C to +85 °C
Storage Temperature: –60 °C to +105 °C

USB Series

Material

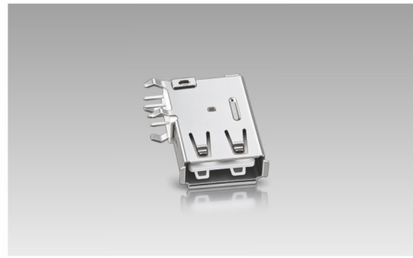
1. Housing: Nylon, PBT(UL94-VO) Color: White, Black,
Blue or other colors are available
2. Contacts: Flat Pin: phosphor bronze plated with
Fu" /3u" /6u" /15u" /30u" min. hard gold plated over nickel.
3. Shielding: brass or spcc with nickel plated.

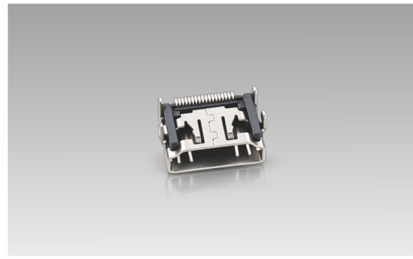
Specifications

Voltage Current Rating:
USB (1 A, 30 VAC)
HDMI (0.5 A, 40 VDC)
Insulation Resistance: 1,000 MΩ min.
Contact Resistance: 30 mΩ max.
Dielectric Withstanding Voltage: 500 V AC

USB2.0: Single USB2.0/Dual USB2.0 (PTH solder type) available
Single USB2.0(SMT solder type) available

USB3.0: Single USB3.0/Dual USB3.0 (PTH solder type) available
Single USB3.0 (SMT solder type) available







Type C Series Connector





Materials

1. HOUSING: LCP (UL 94 V-0), BLACK.
2. TERMINAL: COPPER ALLOY, C18400 T=0.12
GOLD Fu"/3u"/PLATED ON CONTACT AREA.
GOLD FLASH PLATING ON SOLDER TAIL.
NICKEL 50u" UNDERPLATED OVER ALL.
3. MID PLATE: STAINLESS STEEL. SUS301 T=0.15
4. SHELL: STAINLESS STEEL, SUS 301 T=0.30 NICKEL
50u" MIN PLATING
5. EMI: STAINLESS STEEL, SUS 304 T=0.10 NICKEL
50u" MIN PLATING

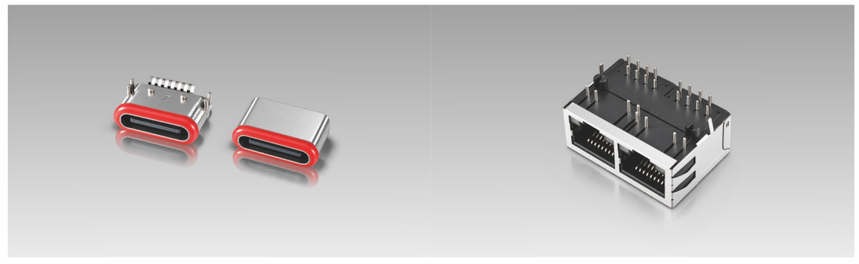
Specifications

1. CURRENT RATING:
5.0 A FOR Vbus PIN,
1.25 A FOR Vconn PIN,
0.25 A FOR OTHER PINS.

2. CONTACT RESISTANCE: 40mΩ.
3. INSULATION RESISTANCE: 100MΩ MIN.
4. DIELECTRIC WITHSTANDING VOLTAGE: 100 VAC MIN.
5. OPERATING TEMPERATURE: -40 ℃ to +85 ℃.
6. MATING FORCE: 5~20 N.
7. UNMATING FORCE: 8~20 N.
8. DURABILITY: 10, 000 CYCLES.
9. RECOMMENDED PROCESS:
THE PEAK TEMPERATURE ON THE BOARD SHALL
MAINTAIN 260 ℃.
10. SALT SPRAY: 48 hour







RJ45 1XN Series Integrated Modules Connector



RJ45 1XN Series

1XN PORT Tab Up/Tab Down 10/100/1000/2.5G/5G Base-T RJ45 Connector

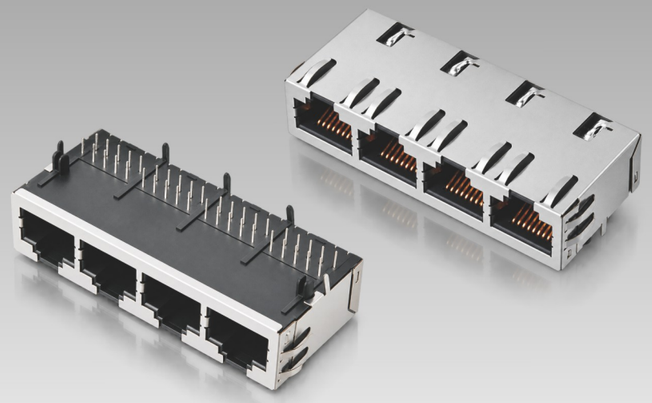
Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black or other colors available
2.Contacts:
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated.
3.Shielding:0.20mm thickness brass with nickel plated.

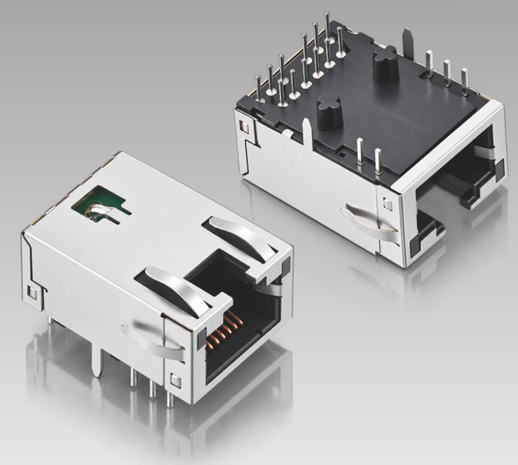
Specification Characteristic
1.Port: 1X1/1X2/1X4
2.Position Number:8 Positions or 10 Positions available
3.Contact Number: 8 Contacts
4.Tab Up or Tab Down available.
5.Shielding: Non-Shielded/Shielded with EMI Finger/Shielded without EMI Finger
6.Magnetics:10/100 Base-T, 10/100/1000 Base-T Schematic available.
7.LED:Without LED/ With LED option (Differnet colors of LED option available)
8.1X1 port Tab up / SMT Type available.

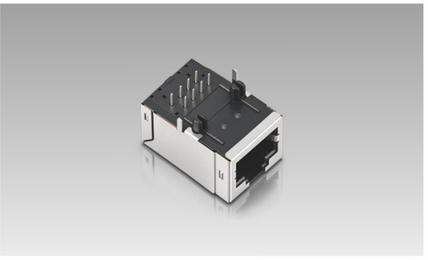
Feature
Shielded RJ45 connector with integrated 10/100 or Gigabit Ethernet
Complies with IEEE802.3 standards
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Integrated design conserves valuable board space.
Minimum interwinding breakdown voltage of 1500Vrms.
Adaptable,modular design provides higher reliability.
Operating temperature:0℃ to +70℃
Storage temperature:-40℃ to +85℃

ELECTRICAL CHARACTERISTICS @ 25°C
10/100 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
1MHz-100MHz -1.1dB MAX.
Return Loss:(Load:100 ohms)
1MHz-30MHz -18dB MIN.
30MHz-60MHz -18+20Log(F/30)dB MIN
60MHz-80MHz -12dB MIN.
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.

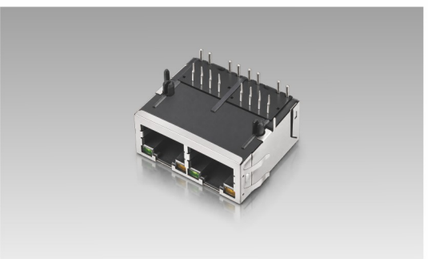
10/100/1000 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC Min.
Insertion Loss:
100KHz-1MHz -1.1dB MAX.
1MHz-65MHz- 0.8dB MAX.
65MHz-100MHz -1.0dB MAX.
100MHz-125MHz -1.2dB MAX.
Return Loss:(Load:100 ohms)
1MHz-40MHz -18dB MIN.
40MHz-100MHz -12+20Log(F/80)dB MIN
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-40MHz -30dB MIN.
40MHz-100MHz -33+20Log(F/50)dB MIN











RJ45 1XN Series

1XN PORT Tab Up/Tab Down 10/100/1000/2.5G/5G Base-T RJ45 Connector

Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black or other colors available
2.Contacts:
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated.
3.Shielding:0.20mm thickness brass with nickel plated.

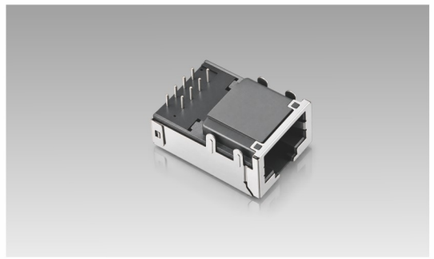
Specification Characteristic
1.Port: 1X1/1X2/1X4
2.Position Number:8 Positions or 10 Positions available
3.Contact Number: 8 Contacts
4.Tab Up available.
5.Shielding: Non-Shielded/Shielded with EMI Finger/Shielded without EMI Finger
6.Magnetics:10/100 Base-T, 10/100/1000 Base-T Schematic available.
7.LED:Without LED/ With LED option (Differnet colors of LED option available)

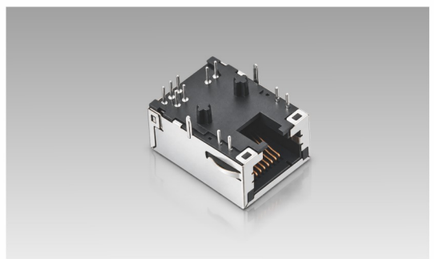
Feature
Shielded RJ45 connector with integrated 10/100 or Gigabit Ethernet
Complies with IEEE802.3 standards
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Integrated design conserves valuable board space.
Minimum interwinding breakdown voltage of 1500Vrms.
Adaptable,modular design provides higher reliability.
Operating temperature:0℃ to +70℃
Storage temperature:-40℃ to +85℃

ELECTRICAL CHARACTERISTICS @ 25°C
10/100 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
1MHz-100MHz -1.1dB MAX.
Return Loss:(Load:100 ohms)
1MHz-30MHz -18dB MIN.
30MHz-60MHz -18+20Log(F/30)dB MIN
60MHz-80MHz -12dB MIN.
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.

10/100/1000 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
100KHz-1MHz -1.1dB MAX.
1MHz-65MHz -0.8dB MAX.
65MHz-100MHz -1.0dB MAX.
100MHz-125MHz -1.2dB MAX.
Return Loss:(Load:100 ohms)
1MHz-40MHz -18dB MIN.
40MHz-100MHz -12+20Log(F/80)dB MIN
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-40MHz -30dB MIN.
40MHz-100MHz -33+20Log(F/50)dB MIN







RJ45 1X1 Series

1XN PORT Tab Up/Tab Down 10/100/1000/2.5G/10G Base-T RJ45 Connector

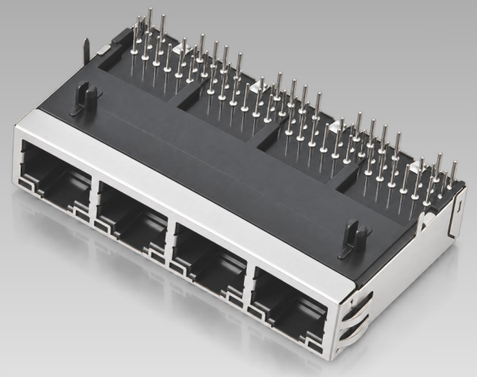
Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black or other colors available
2.Contacts:
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated.
3.Shielding:0.20mm thickness brass with nickel plated.

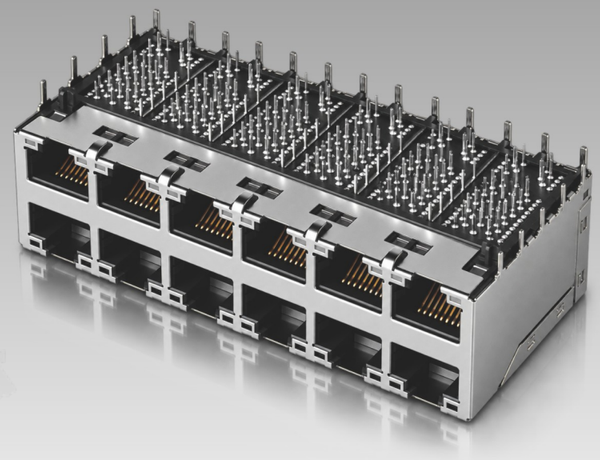
Specification Characteristic
1.Port: 1X1
2.Position Number:8 Positions or 12 Positions available
3.Contact Number: 8 Contacts
4.Tab Up or Tab Down available.
5.Shielding: Shielded with EMI Finger/Shielded without EMI Finger
6.Magnetics:10/100 Base-T, 10/100/1000 Base-T,10G Base-T Schematic available.
7.LED:Without LED/ With LED option (Differnet colors of LED option available)

Feature
Ultra low profile design
Shielded RJ45 connector with integrated 10/100BASE-T or 10/100/100BASE-T or 10GBASE-T Ethernet
Complies with IEEE802.3/IEEE802.3an standards
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Integrated design conserves valuable board space.
Minimum interwinding breakdown voltage of 1500Vrms.
Adaptable,modular design provides higher reliability.
Operating temperature:0℃ to +70℃
Storage temperature:-40℃to +85℃

ELECTRICAL CHARACTERISTICS @ 25°C
10/100/1000 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
1MHz-100MHz -1.1dB MAX.
Return Loss:(Load:100 ohms)
1MHz-30MHz -18dB MIN.
30MHz-60MHz -18+20Log(F/30)dB MIN
60MHz-80MHz -12dB MIN.
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.

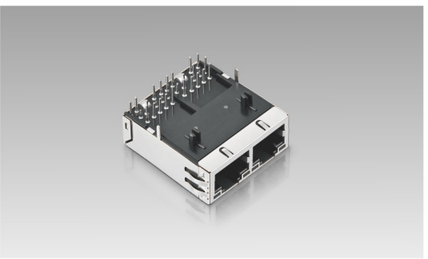
10G BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
120uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
1MHz-20MHz -0.8dB MAX.
50MHz -1.0dB MAX.
200MHz -1.2dB MAX.
400MHz -2.0dB MAX.
500MHz -3.0dB MAX.
Return Loss: (Load:100 ohms)
1MHz-40MHz -22dB MIN.
40MHz-100MHz -20dB MIN.
100MHz-200MHz -18dB MIN.
200MHz-300MHz -15dB MIN.
300MHz-400MHz -10dB MIN.
400MHz-500MHz -8dB MIN.
CM to CM Rejection:
1MHz-500MHz -20dB MIN.
CM to DM Rejection:
1MHz-250MHz -30dB MIN.
250MHz-500MHz -22dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.
100MHz-500MHz -20dB MIN











RJ45 1XN Series

1XN PORT Tab Up/Tab Down 10/100/1000/2.5G/5G
Base-T RJ45 Connector
With POE/POE+/UPOE/POE++ Options

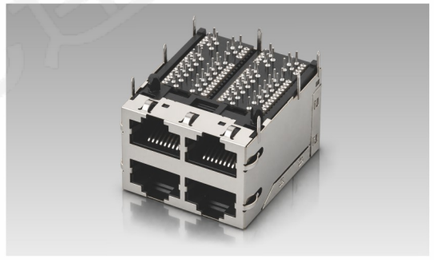
Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black or other colors available
2.Contacts:
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated.
3.Shielding:0.20mm thickness brass with nickel plated.

Specification Characteristic
1.Port: 1X1/1X2/1X4
2.Position Number:8 Positions or 10 Positions available
3.Contact Number: 8 Contacts
4.Tab Up or Tab Down available.
5.Shielding: Non-Shielded/Shielded with EMI Finger/Shielded without EMI Finger
6.Magnetics:10/100 Base-T, 10/100/1000 Base-T Schematic available.
7.LED:Without LED/ With LED option (Differnet colors of LED option available)

Feature
Shielded RJ45 connector with integrated 10/100 or Gigabit Ethernet
Complies with IEEE802.3 standards
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Integrated design conserves valuable board space.
Minimum interwinding breakdown voltage of 1500Vrms.
Adaptable,modular design provides higher reliability.
Operating temperature:0℃ to +70℃
Storage temperature:-40℃ to +85℃

ELECTRICAL CHARACTERISTICS @ 25°C
10/100 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
1MHz-100MHz -1.1dB MAX.
Return Loss:(Load:100 ohms)
1MHz-30MHz -18dB MIN.
30MHz-60MHz -18+20Log(F/30)dB MIN
60MHz-80MHz -12dB MIN.
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.

10/100/1000 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
100KHz-1MHz -1.1dB MAX.
1MHz-65MHz -0.8dB MAX.
65MHz-100MHz -1.0dB MAX.
100MHz-125MHz -1.2dB MAX.
Return Loss:(Load:100 ohms)
1MHz-40MHz -18dB MIN.
40MHz-100MHz -12+20Log(F/80)dB MIN
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-40MHz -30dB MIN.
40MHz-100MHz -33+20Log(F/50)dB MIN







RJ45 2XN Series

Stacked Ports 10/100/1000/2.5G/5G/10G
Base-t RJ45 Modules
With POE/POE+/UPOE/POE++ Options

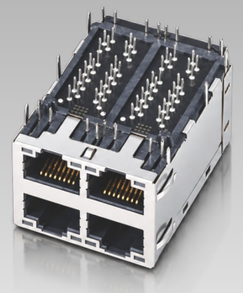
Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black
2.Contacts:Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Minhard gold plated.
3.Shielding:0.20mm thickness brass with nickel plated.

Specification Characteristic
1.Port: 2X1,2X2,2X4,2X6,2X8
2.Position Number:10 or 12 Positions available
3.Contact Number: 8 Contacts
4.Shielding:Shielded with EMI Finger/Shielded without EMI Finger
6.Magnetics:10/100 Base-T, 10/100/1000 Base-T ,POE , POE Plus Schematic available.
7.ESD/Surge Protection option.
8.LED:Without LED/ With Back LED option (Differnet colors of LED option available)

Feature
Shielded RJ45 connector with integrated 10/100 or Gigabit Ethernet
Complies with IEEE802.3af/at standards
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Integrated design conserves valuable board space.
Minimum interwinding breakdown voltage of 1500Vrms.
Adaptable,modular design provides higher reliability.
Operating temperature:0℃ to +70℃
Storage temperature:-40℃ to +85℃

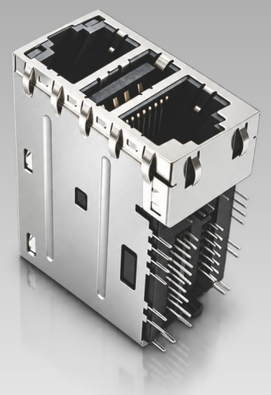
ELECTRICAL CHARACTERISTICS @ 25°C
10/100 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Input to Output isolation 2250VDC.
Insertion Loss:
1MHz-100MHz -1.1dB MAX.
Return Loss:(Load:100 ohms)
1MHz-30MHz -18dB MIN.
30MHz-60MHz -18+20Log(F/30)dB MIN
60MHz-80MHz -12dB MIN.
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.

10/100/1000 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Input to Output isolation 2250VDC.
Insertion Loss:
100KHz-1MHz -1.1dB MAX.
1MHz-65MHz -0.8dB MAX.
65MHz-100MHz -1.0dB MAX.
100MHz-125MHz -1.2dB MAX.
Return Loss:(Load:100 ohms)
1MHz-40MHz -18dB MIN.
40MHz-100MHz -12+20Log(F/80)dB MIN
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-40MHz -30dB MIN.
40MHz-100MHz -33+20Log(F/50)dB MIN
Balanced DC Line current/Voltage rating(PSE Pins)
720mA Maximum @ 57V Continuous

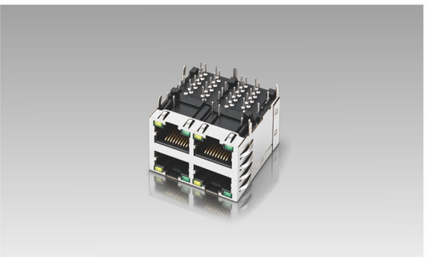


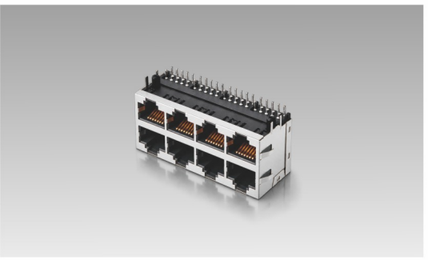












RJ45 2XN Series

Stacked Ports 10/100/1000/2.5G/5G
Base-t RJ45 Modules
With POE/POE+/UPOE/POE++ Options

Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black
2.Contacts:
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated.
3.Shielding:0.20mm thickness brass with nickel plated.

Specification Characteristic
1.Port:2X4,2X6,2X8
2.Position Number:12 Positions available
3.Contact Number: 8 Contacts
4.Shielding:Shielded with EMI Finger/Shielded without EMI Finger
6.Magnetics:10/100 Base-T,POE , POE Plus Schematic available.
7.LED:Without LED/ With Front LED option (Differnet colors of LED option available)

Feature
Shielded RJ45 connector with integrated 10/100 POE/POE Plus Ethernet
Complies with IEEE802.3af/at standards
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Integrated design conserves valuable board space.
Minimum interwinding breakdown voltage of 1500Vrms.
Adaptable,modular design provides higher reliability.
Operating temperature:0℃ to +70℃
Storage temperature:-40℃ to +85℃

ELECTRICAL CHARACTERISTICS @ 25°C
10/100 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
1MHz-100MHz -1.1dB MAX.
Return Loss:(Load:100 ohms)
1MHz-30MHz -18dB MIN.
30MHz-60MHz -18+20Log(F/30)dB MIN
60MHz-80MHz -12dB MIN.
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.

10/100/1000 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
100KHz-1MHz -1.1dB MAX.
1MHz-65MHz -0.8dB MAX.
65MHz-100MHz -1.0dB MAX.
100MHz-125MHz -1.2dB MAX.
Return Loss:(Load:100 ohms)
1MHz-40MHz -18dB MIN.
40MHz-100MHz -12+20Log(F/80)dB MIN
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-40MHz -30dB MIN.
40MHz-100MHz -33+20Log(F/50)dB MIN







RJ45+USB & RJ45 Vertical Series

RJ45+USB2.0/3.0 & 10/100/1000/2.5G/5G
Base-T Connector

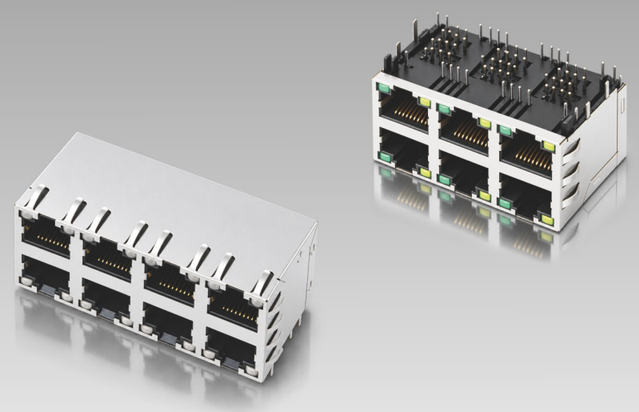
Material
1.Housing:Nylon,PBT(UL94-V0)
2.Contacts:
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated.
3.Shielding:0.20mm thickness brass with nickel plated.

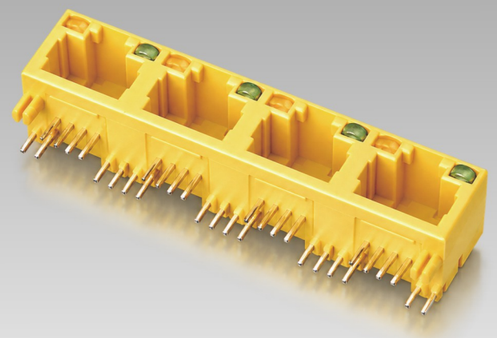
Specification Characteristic
1.Port: 1X1
4.DE68 Vertical 180 Degree type design/ DE67 RJ45 with USB Combination
5.Shielding:Shielded with EMI Finger/Shielded without EMI Finger
6.Magnetics:10/100 Base-T, 10/100/1000 Base-T Schematic available.
7.LED:Without LED/ With LED option (Differnet colors of LED option available)
8.RJ45 with single USB2.0/ RJ45 with single USB3.0. available
RJ45 with dual USB3.0/ RJ45 with dual USB3.0. available

Feature
Shielded RJ45 connector with integrated 10/100 or Gigabit Ethernet
Complies with IEEE802.3 standards
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Integrated design conserves valuable board space.
Minimum interwinding breakdown voltage of 1500Vrms.
Adaptable,modular design provides higher reliability.
Operating temper ature:0℃ to +70℃
Storage temperature:-40℃ to +85℃

ELECTRICAL CHARACTERISTICS @ 25°C
10/100 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
1MHz-100MHz -1.1dB MAX.
Return Loss:(Load:100 ohms)
1MHz-30MHz -18dB MIN.
30MHz-60MHz -18+20Log(F/30)dB MIN
60MHz-80MHz -12dB MIN.
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.

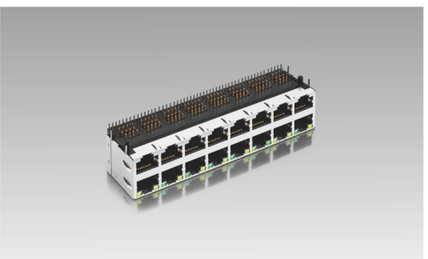
10/100/1000 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
100KHz-1MHz -1.1dB MAX.
1MHz-65MHz -0.8dB MAX.
65MHz-100MHz -1.0dB MAX.
100MHz-125MHz -1.2dB MAX.
Return Loss:(Load:100 ohms)
1MHz-40MHz -18dB MIN.
40MHz-100MHz -12+20Log(F/80)dB MIN
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-40MHz -30dB MIN.
40MHz-100MHz -33+20Log(F/50)dB MIN











RJ45 2XN Series

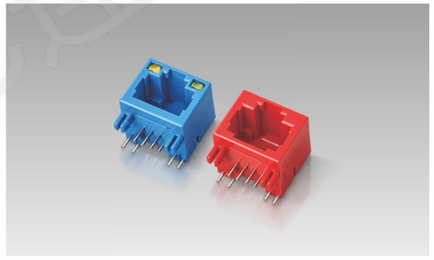
RJ45 Module Jack Without Magnetics

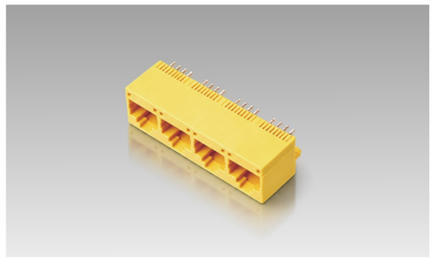
Material
1.Housing:Nylon,PBT(UL94-V0)Color:Black, Gray or other colors available.
2.Contacts:
Round Pin:0.46mm diameter phosphor bronze hard temper with hard gold plating thickness options(Fu"/ 3u"/6u"/15u"/30u"/50u")over 50u" min nickel.
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated over nickel.
3.Shielding:0.20mm thickness brass with nickel plated.

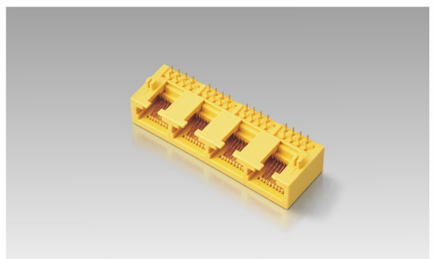
Specification Characteristic
1.Port: 2X1,2X2,2X4,2X6,2X8
2.Position Number:8 Positions available
3.Contact Number: 8 Contacts
4.Shielding:Shielded with EMI Finger/Shielded without EMI Finger
5.LED:Without LED/ With LED option (Differnet colors of LED option available)

Electrical
1.Current Rating:1.5Amps per contact
2.Voltage Rating: 125Volts AC
3.Contact Resistance:30 miliohms Max
4.Insulation resistance:500Megohms Min @ 500VDC.
5.Dielectric Withstanding Voltage:Contact to contact 1000VAC @ 60HZ

Feature
Shielded RJ45 Modular Jack (withou magnetics).
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Operating temperature:-40℃ to +85℃
Storage temperature:-40℃ to +85℃







RJ45 1XN Series

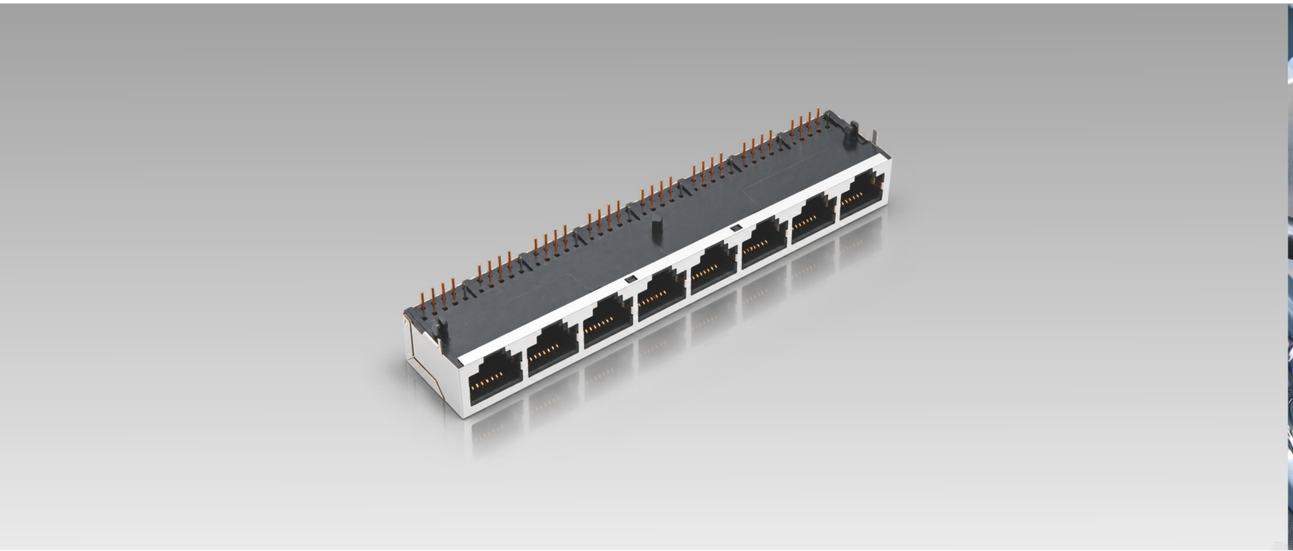
Rj45 Module Jack Without Magnetics

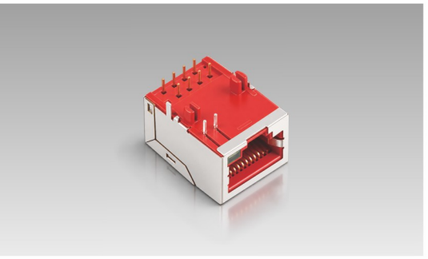
Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black,Gray or other colors available.
2.Contacts:
Round Pin:0.46mm diameter phosphor bronze hard temper with hard gold plating thickness options(Fu"/ 3u"/6u"/15u"/30u"/50u")over 50u" min nickel.
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated over nickel.
3.Shielding:0.20mm thickness brass with nickel plated.

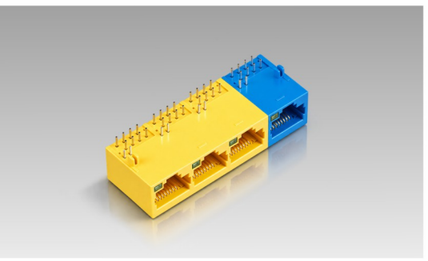
Specification Characteristic
1.Port: 1X1,1X2,1X4,1X8
2.Position Number:8 Positions available
3.Contact Number: 8 Contacts
4.Shielding:Withour Shield/Shielded with EMI Finger/ Shielded without EMI Finger
5.LED:Without LED/ With LED option (Differnet colors of LED option available)

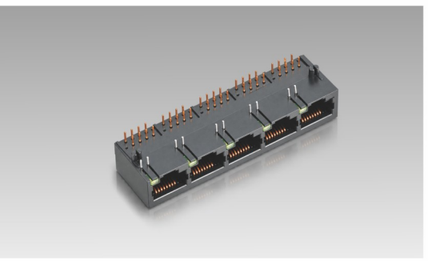
Electrical
1.Current Rating:1.5Amps per contact
2.Voltage Rating: 125Volts AC
3.Contact Resistance:30 miliohms Max
3.Insulation resistance:500Megohms Min @ 500VDC.
4.Dielectric Withstanding Voltage:Contact to contact 1000VAC @ 60HZ

Feature
Shielded RJ45 Modular Jack (withou magnetics).
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Operating temperature:-40℃ to +85℃
Storage temperature:-40℃ to +85℃









RJ45 1XN Series

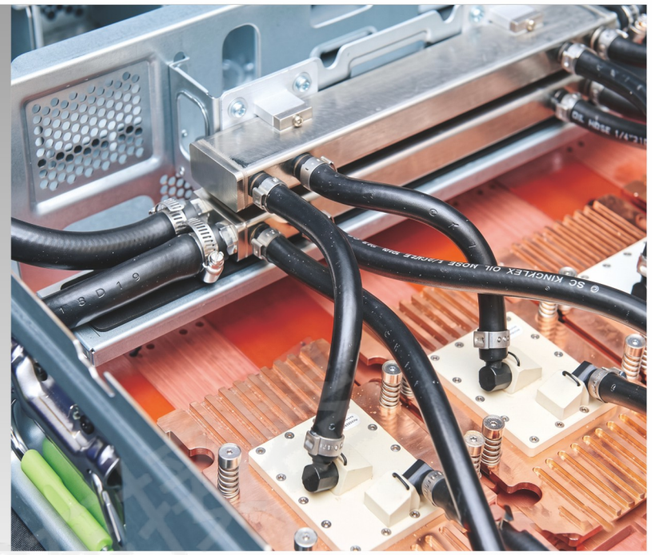
RJ45 Module Jack Without Magnetics

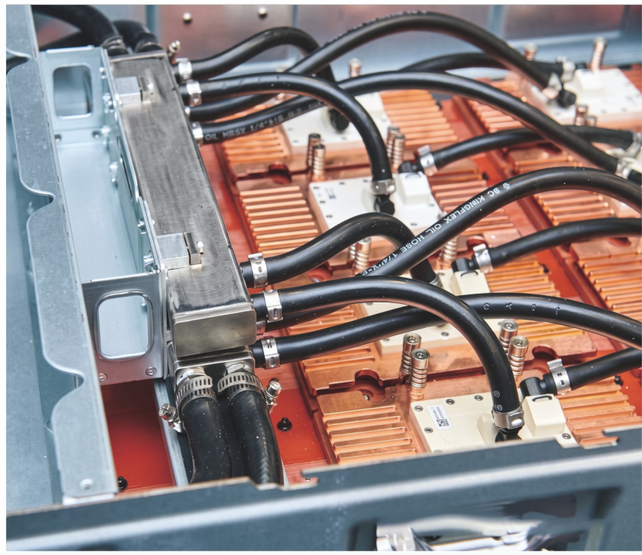
Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black,Gray or other colors available.
2.Contacts:
Round Pin:0.46mm diameter phosphor bronze hard temper with hard gold plating thickness options(Fu"/ 3u"/6u"/15u"/30u"/50u")over 50u" min nickel.
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated over nickel.
3.Shielding:0.20mm thickness brass with nickel plated.

Specification Characteristic
1.Port: 1X1,1X2,1X5,1X6,1X8
2.Position Number:8 Positions/10 Positions available
3.Contact Number: 8 Contacts /10 Contacts
4.Shielding:without Shield/Shielded with EMI Finger/Shielded without EMI Finger
5.LED:Without LED/ With LED option (Differnet colors of LED option available)

Electrical
1.Current Rating:1.5Amps per contact
2.Voltage Rating: 125Volts AC
3.Contact Resistance:30 miliohms Max
4.Insulation resistance:500Megohms Min @ 500VDC.
5.Dielectric Withstanding Voltage:Contact to contact 1000VAC @ 60HZ

Feature:
Shielded RJ45 Modular Jack (withou magnetics).
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Operating temperature:-40℃ to +85℃
Storage temperature:-40℃ to +85℃



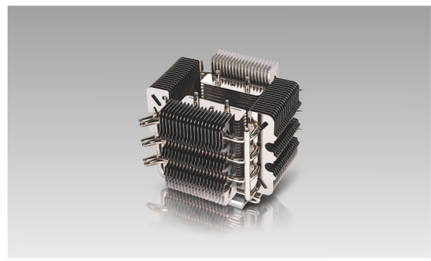


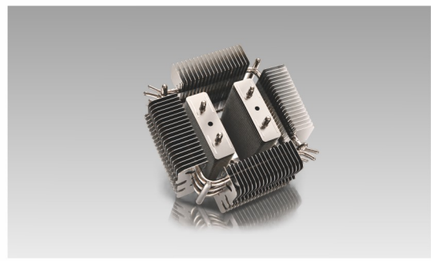
Material:
1. Sink: Copper heat pipe with aluminum fin
2. Pedestal: Copper
3. Plating: Ni plating
4. Contact Surface medium: Thermal paste or grease

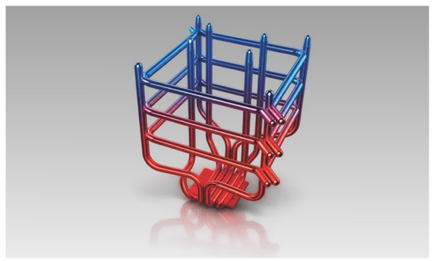
Electrical:
1. Voltage Rating: 12 V
2. Current Rating: 0.25–2.5 A options
3. Fan Speed: 800–1,500 RPM
4. Rated Power: 3–30 W options

Feature
1. Anti-gravity pure-copper heat pipes rapidly transfer heat away from the chip.
2. PWM intelligent speed control with a high-performance fan.
3. Innovative design and excellent quality.
4. Multi-platform support.
5. Operating Temperature: 0 °C to 85 °C
6. Storage Temperature: –40 °C to 105 °C

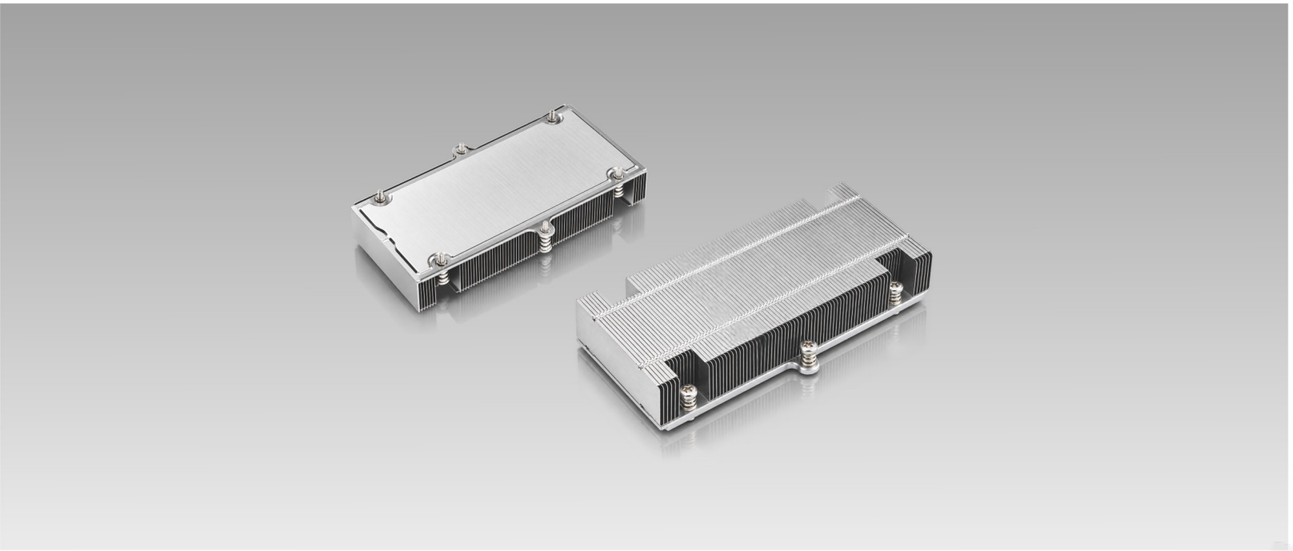








Vapor Chamber and Heat Sink



Vapor Chamber and Heat Sink

Material

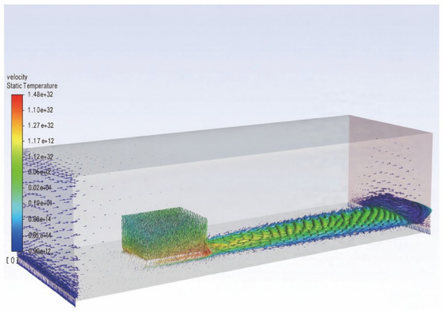
Colors: silver, copper, and other colors are available.
Pedestal: Copper
Sink: Aluminum and Copper
Plating: Ni 50" min.
Contact Surface Medium: Thermal Paste or Grease

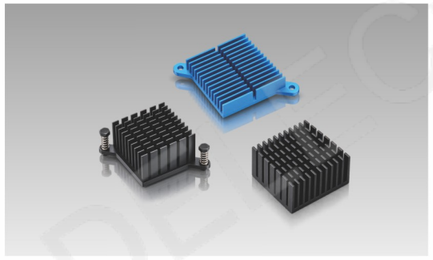
Feature

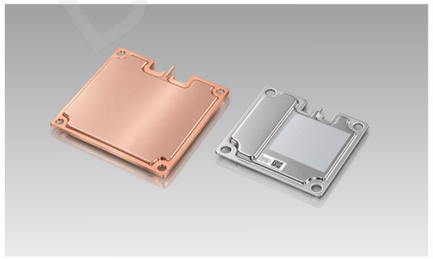
Operating Temperature: 0 °C to 80 °C
Storage Temperature: –40 °C to 130 °C
Pressure Resistance: 3.0 kg/cm²
Thermal Shock: –40 °C to 100 °C, 500 cycles
Service Life: 10 years

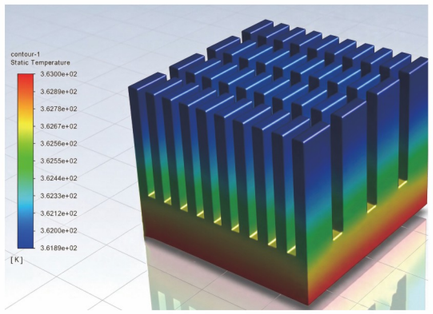
Specifications

Qmax: 350 W
Minimum Thermal Resistance: 0.152 K/W
Heat Sink Height: 1U
Sink Thickness: 0.45 mm
Pedestal Thickness: 3.1 mm
Pedestal Area: 144 cm²
Flatness: <50 μm









Memo

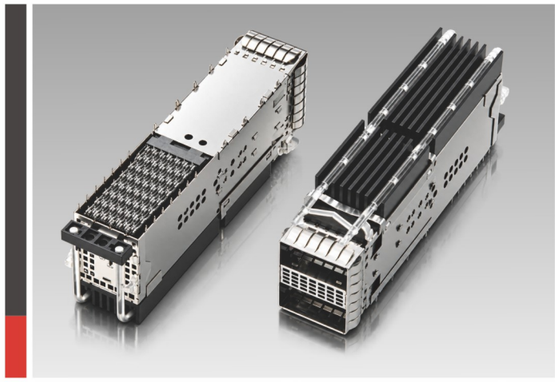
Memo

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DELEC's Official
Website

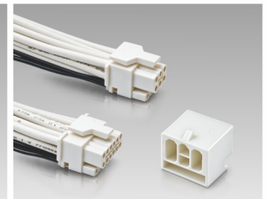
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China Site: www.delec.cn

DELEC®
Connectors













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Email: sales@delec.tw

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In Producing Connectors and Cables



Our Goals

- Continue developing new and innovative designs across all product offerings.
- Maintain a people-oriented team with high integrity to support the company's growth.
- Provide excellent customer service and maintain long-term relationships with our customers.
- Further improve customer service through future ERP and CRM support.

Certification

IECQ ISO RBA

SGS UL

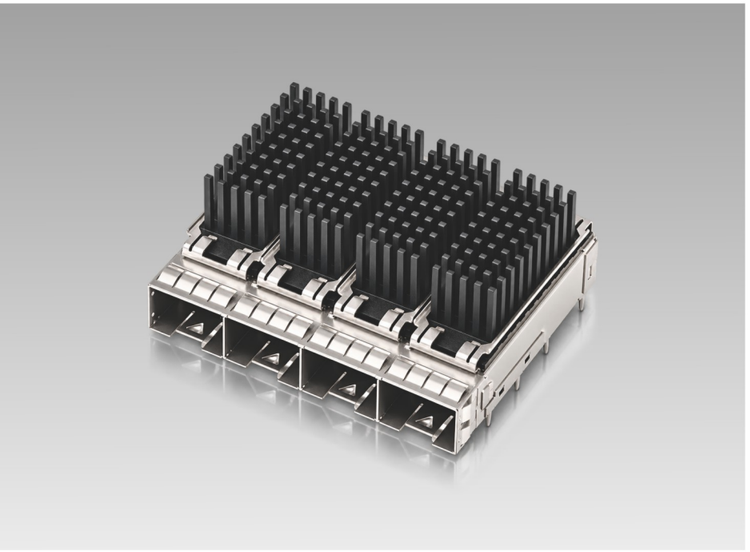
Brief introduction

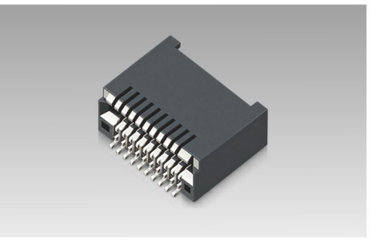
Established in December 1997, DELEC is a rapidly expanding company in the telecommunications and computer interconnect market. We produce a wide array of telecommunications jacks and computer connectors.

Quality is a core value of our company. We believe that quality drives our success and earns the support of our partners. As an ISO 9001-certified company, we maintain stringent standards for our products. With ISO 14001 certification, we take precautions to protect the environment. All our product lines also meet UL and cUL safety standards.

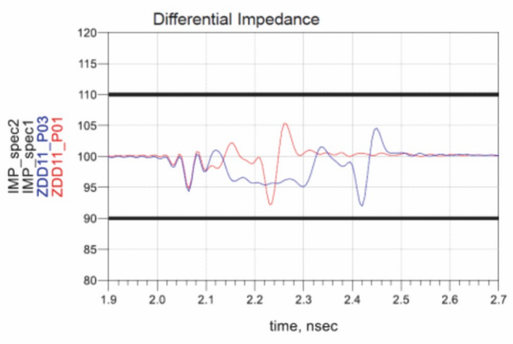
We have developed innovative designs for a variety of integrated network interface modules that vary in application. Our latest series of interface modules include increases in density and reductions in modular components, delivering greater value to customers. Our design efforts in 10BASE-T, 10/100BASE-TX, Gigabit magnetic components, and RJ45 metal shield covers have been widely accepted and have become industry standards.

Single & Rows SFP+, SFP56 Cage/Connector









Specification Highlights

The interconnect system comprises a cage assembly used with 20-position SFP connectors that comply with MSA INF-8074i and standards SFF-8081, SFF-8083, SFF-8432, and SFF-8433.

Configurations (Rows x Ports per Row)

1. 1x1 ,1x2 ,1x4 ,1x6
2. 2x1, 2x2, 2x3, 2x4, 2x6, 2x8 ,2x12

General Characteristics

1. RoHS Compliant
2. Industry-Standard Footprint
3. Meets EIA-364 Industry Standards

Mechanical Characteristics

1. Compliant Press-Fit Pins or Solder Tails (Single Ports)
2. Durability: 250 mating cycles min.

Electrical Characteristics

1. Hot-Swappable
2. Operating Voltage: 3.3 V
3. Operating Current: 0.5 A
4. Differential Impedance: 100 Ω ± 10 Ω
5. DWV: 300 VAC
6. Insulation Resistance: 1,000 MΩ min.
7. Contact Resistance: 70 mΩ max.

Materials

1. Cage

Base Material: Copper Alloy

Light Pipe: Optical Grade Polycarbonate

Heat Sink: Aluminum Alloy

Heat Sink Clip: Stainless Steel

Dust Cover: Thermoplastic

EMI Ground Tabs: Stainless Steel

2. Connector

Contact Base Material: Copper Alloy

Contact Plating: Gold on Mating Area, Gold or Matte Tin on Termination

Housing: Glass Reinforced, Lead-Free Solder Reflow Process Compatible Thermoplastic,

UL94 V-0 Rated

Temperature Rating

1. Operating Temperature: –40 °C to +85 °C
2. Storage Temperature: –55 °C to +105 °C

Options

1. Dust Cover
2. Light Pipe (Inner or Outer)
3. Heat Sink
4. EMI Spring Fingers

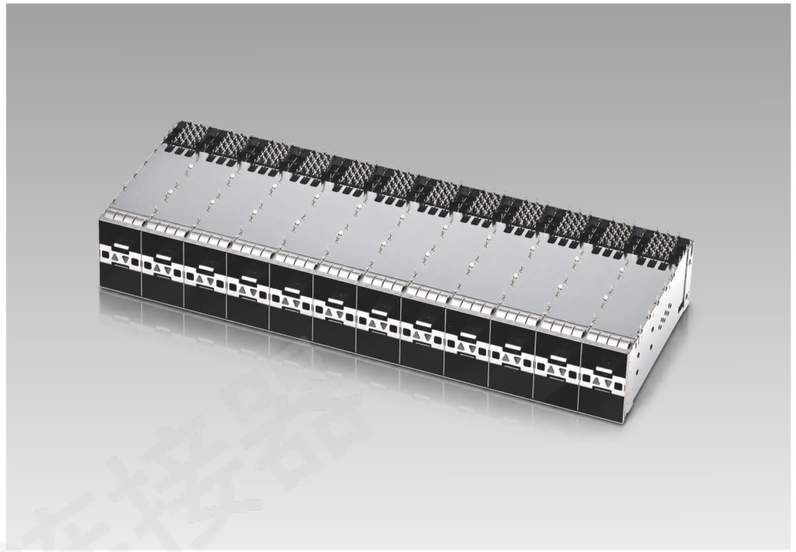
Metal Spring Fingers

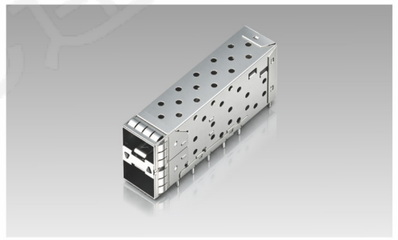
Conductive Elastomeric Gasket

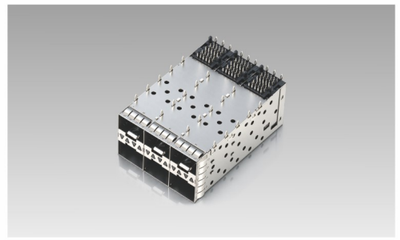
Packaging

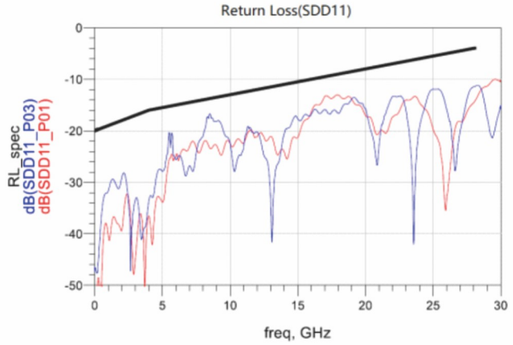
1. Tray Packaging: Cage and Connector Assembly
2. Bulk Packaging: Dust Cover

Stacked, SFP+, SFP56 Connector









Specification Highlights

The interconnect system comprises a cage assembly used with 20-position SFP connectors that comply with MSA INF-8074i and standards SFF-8081, SFF-8083, SFF-8432, and SFF-8433.

Configurations (Rows x Ports per Row)

1. 1x1 1x2 1x4 1x6
2. 2x1 2x2 2x3 2x4 2x6 2x8 2x12

General Characteristics

1. RoHS Compliant
2. Industry Standard Footprint
3. Industry Standard EIA-364

Mechanical Characteristics

1. Compliant Press-Fit Pins or Solder Tails（Single Ports）
2. Durability: 250 mating cycles min.

Electrical Characteristics

1. Hot Swappable
2. Operating Voltage: 3.3 V
3. Operating Current: 0.5 A
4. Differential Impedance: 100 Ω ± 10 Ω
5. DWV: 300 VAC
6. Insulation Resistance: 1,000 MΩ min.
7. Contact Resistance: 70 mΩ max.

Materials

1. Cage

Base Material: Copper Alloy

Light Pipe: Optical Grade Polycarbonate

Heat Sink: Aluminum Alloy

Heat Sink Clip: Stainless Steel

Dust Cover: Thermoplastic

EMI Ground Tabs: Stainless Steel

2. Connector

Contact Base Material: Copper Alloy

Contact Plating: Gold on Mating Area, Gold or Matte Tin on Termination

Housing: Glass Reinforced, Lead-Free Solder Reflow Process Compatible Thermoplastic,

Ul94 V-0 Rated

Temperature Rating

1. Operating Temperature: –40 °C to +85 °C
2. Storage Temperature: –55 °C to +105 °C

Options

1. Dust Cover
2. Light Pipe (Inner or Outer)
3. Heat Sink
4. EMI Spring Fingers

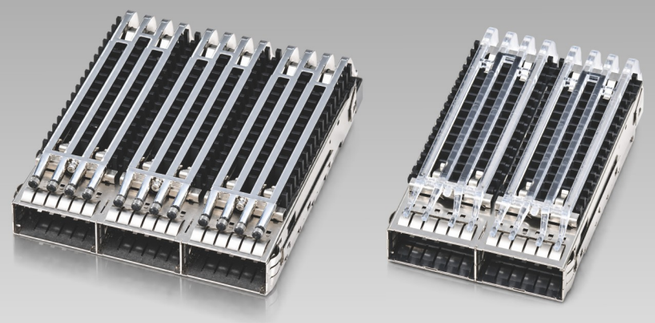
Metal Spring Fingers

Conductive Elastomeric Gasket

Packaging

1. Tray Packaging: Cage and Connector Assembly
2. Bulk Packaging: Dust Cover

Single & Rows QSFP+,QSFP56 1×N Cage







Specification Highlights

The interconnect system comprises a cage assembly used with 38-position QSFP connectors that comply with standards SFF-8682, SFF-8672, SFF-8683, SFF-8662, and SFF-8663.

Configurations (Rows x Ports per Row)

1. 1x1 1x2 1x3 1x4

General Characteristics

1. RoHS Compliant
2. Industry Standard Footprint
3. Industry Standard EIA-364

Mechanical Characteristics

1. Compliant Press-Fit Pins or Solder Tails（Single Ports）
2. Durability: 250 mating cycles min.

Electrical Characteristics

1. Hot Swappable
2. Operating Voltage: 30 VDC per contact
3. Operating Current: 0.5 A
4. Differential Impedance: 100 Ω ± 10 Ω
5. DWV: 300 VAC
6. Insulation Resistance: 1,000 MΩ min.
7. Contact Resistance: 70 mΩ max.

Temperature Rating

1. Operating Temperature: –40 °C to +85 °C
2. Storage Temperature: –55 °C to +105 °C

Options

1. Dust Cover
2. Light Pipe (Inner or Outer)
3. Heat Sink
4. EMI Spring Fingers

Metal Spring Fingers

Conductive Elastomeric Gasket

Packaging

1. Tray Packaging: Cage and Connector Assembly
2. Bulk Packaging: Dust Cover

Materials

1. Cage

Base Material: Copper Alloy

Light Pipe: Optical Grade Polycarbonate

Heat Sink: Aluminum Alloy

Heat Sink Clip: Stainless Steel

Dust Cover: Thermoplastic

EMI Ground Tabs: Stainless Steel

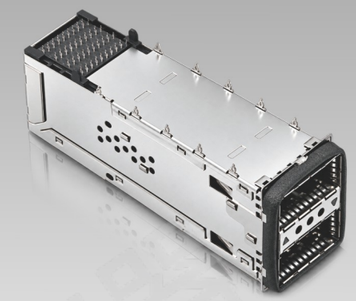
2. Connector

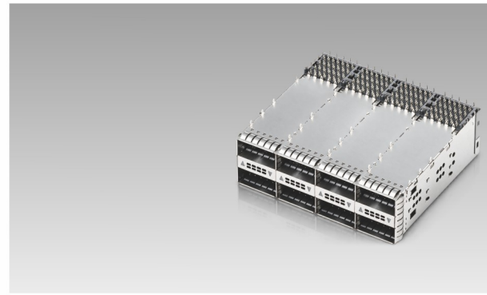
Contact Base Material: Copper Alloy

Contact Plating: Gold on Mating Area, Gold or Matte Tin on Termination

Housings: Glass Reinforced, Lead-Free Solder Reflow Process Compatible Thermoplastic, UL94 V-0 Rated

Single & Stacked QSFP+,QSFP56 Connector









Specification Highlights

The interconnect system comprises a cage assembly used with 38-position QSFP connectors that comply with standards SFF-8682, SFF-8672, SFF-8683, SFF-8662, and SFF-8663.

Configurations (Rows x Ports per Row)

1. 2x1 2x2 2x3 2x4

General Characteristics

1. RoHS Compliant
2. Industry Standard Footprint
3. Industry Standard EIA-364

Mechanical Characteristics

1. Compliant Press-Fit Pins or Solder Tails（Single Ports）
2. Durability: 250 mating cycles min.

Electrical Characteristics

1. Hot Swappable
2. Operating Voltage: 30 VDC per contact
3. Operating Current: 0.5 A
4. Differential Impedance: 100 Ω ± 10 Ω
5. DWV: 300 VAC
6. Insulation Resistance: 1,000 MΩ min.

7. Contact Resistance: 70 mΩ max.

Materials

1. Cage

Base Material: Copper Alloy

Light Pipe: Optical Grade Polycarbonate

Heat Sink: Aluminum Alloy

Heat Sink Clip: Stainless Steel

Dust Cover: Thermoplastic

EMI Ground Tabs: Stainless Steel

2. Connector

Contact Base Material: Copper Alloy

Contact Plating: Gold on Mating Area, Gold or Matte Tin on Termination

Housing: Glass Reinforced, Lead-Free Solder Reflow Process Compatible Thermoplastic,

Ul94 V-0 Rated

Temperature Rating

1. Operating Temperature: –40 °C to +85 °C
2. Storage Temperature: –55 °C to +105 °C

Options

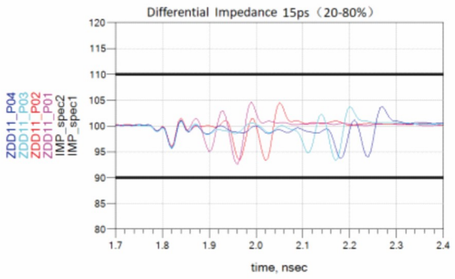
1. Dust Cover
2. Light Pipe (Inner or Outer)
3. Heat Sink
4. EMI Spring Fingers

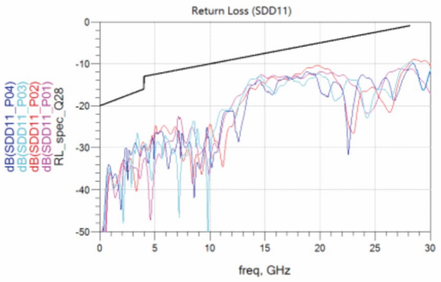
Metal Spring Fingers

Conductive Elastomeric Gasket

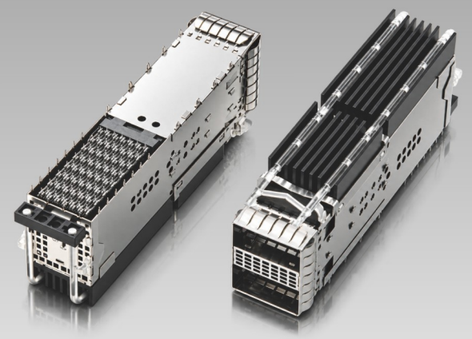
Packaging

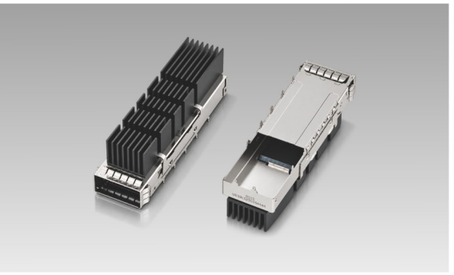
1. Tray Packaging: Cage and Connector Assembly
2. Bulk Packaging: Dust Cover





Single & Stacked SFP-DD,QSFP-DD Connector



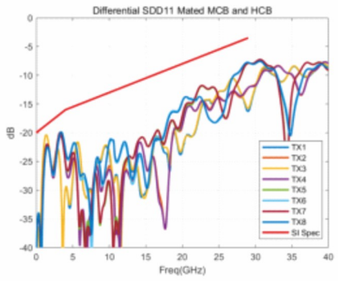


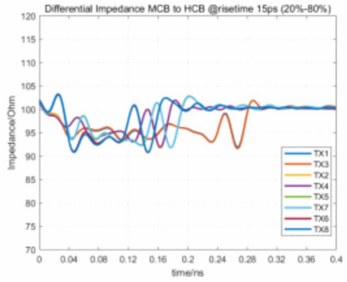




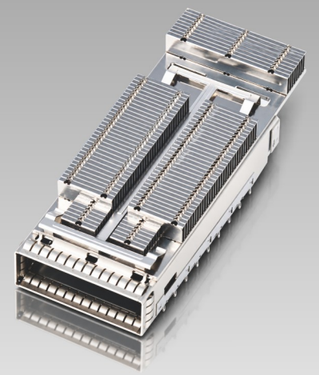
Specification Highlights
Complies with the SFP-DD MSA
and INF-8628.
Configurations (Rows x Ports per Row)
1. 1x1
2. 2x1
General Characteristics
1. RoHS Compliant
2. Industry Standard Footprint
3. Industry Standard EIA-364
Mechanical Characteristics
1. Compliant Press-Fit Pins or Solder Tails（Single Ports）
2. Durability: 250 mating cycles min.
Electrical Characteristics
1. Hot Swappable
2. Operating Voltage: 30 VDC per contact
3. Operating Current: 0.5 A
4. Differential Impedance: 100 Ω ± 10 Ω
5. DWV: 300 VAC
6. Insulation Resistance: 1,000 MΩ min.
7. Contact Resistance: 70 mΩ max.

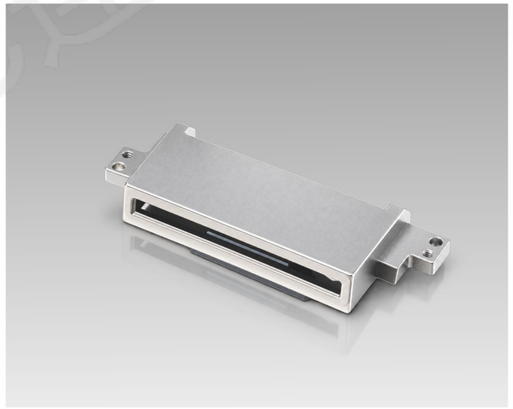
Materials
1. Cage
Base Material: Copper Alloy
Light Pipe: Optical Grade Polycarbonate
Heat Sink: Aluminum Alloy
Heat Sink Clip: Stainless Steel
Dust Cover: Thermoplastic
EMI Ground Tabs: Stainless Steel

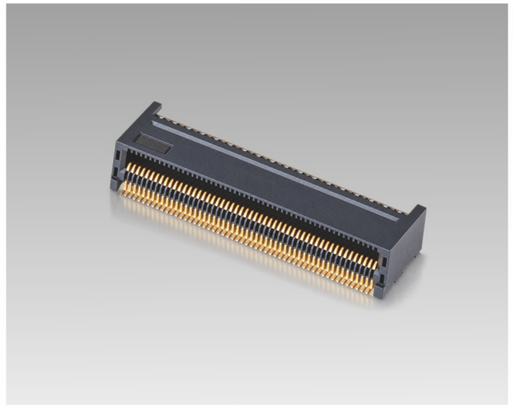




Single & Rows CFP2 Cage/Connector







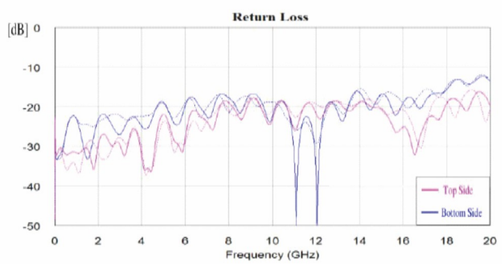
Material
1. Housing: Black color, Glass reinforced, Lead Free Solder Reflow Process Compatible Thermoplastic
2. Contacts Base Material: Phosphor Bronze
3. Plating Solder Tails: Matte tin
4. Plating Mating Area: Gold
5. Resonance Dampening Feature: Conductive Polymer

Mechanical Performance
1. Durability: 200 mating cycles
2. Mating Force: 80 N max.
3. Contact Normal Force: 30 grams
4. PCB Thickness (Cage): 3.00 mm (0.118 in.)
5. Unmating Force (Cage): 50 N

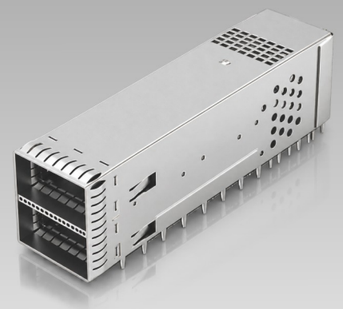
Electrical Performance
1. Operating Voltage: 3.3 V DC per contact
(Class 4 or lower)/1.25 A maximum (Classes 5 and 6)
2. Operating Current (per signal pin): 0.5 A maximum

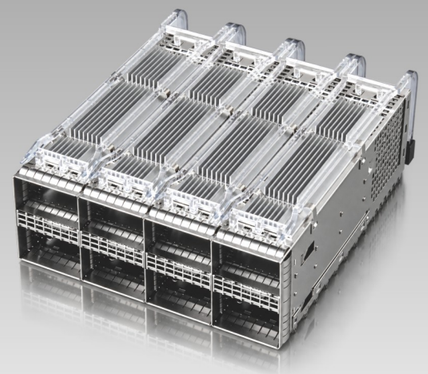
Environmental
1. Operating and Storage Temperature: –40 °C to +85 °C
2. RoHS

Tooling Information
Configurations: 1X1



Single & Stacked OSFP Connector





Material
1. Housing: Black color, Glass reinforced, Lead Free
Solder Reflow Process Compatible Thermoplastic
2. Contacts Base Material: Phosphor Bronze
3. Plating Solder Tails: Matte tin over Nickel
4. Plating Mating Area: Gold
5. Resonance Dampening Feature: Carbon fiber reinforced

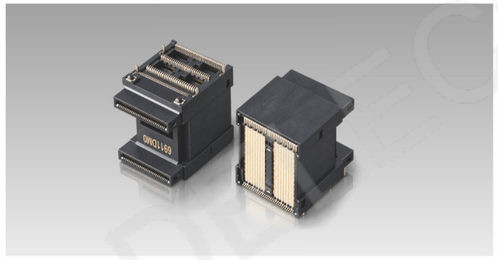
Mechanical Performance
1. Durability: 250 mating cycles
2. Mating Force: 40 N max.
3. Unmating Force: 40 N max.
4. Contact Normal Force: 40 grams min.

Electrical Performance
1. Operating Voltage: 30 VDC per contact
2. Operating Current:
3. 0.5 A per signal contact
4. 1.5 A per low speed power contact
5. Differential Impedance: 100Ω ± 10Ω

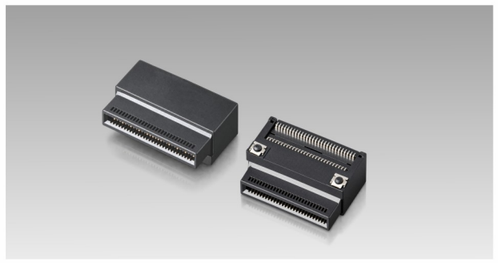
Environmental
1. Operating and Storage Temperature: –20 °C to +85 °C
2. RoHS & Halogen-Free

Tooling Information
1. Configurations:
1x1
2x1

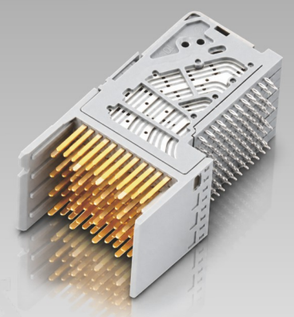
Packaging
Tape and Reel or Tray

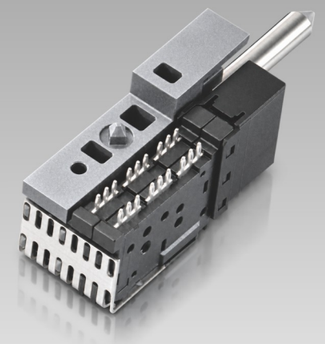






High Speed Backplane Connector





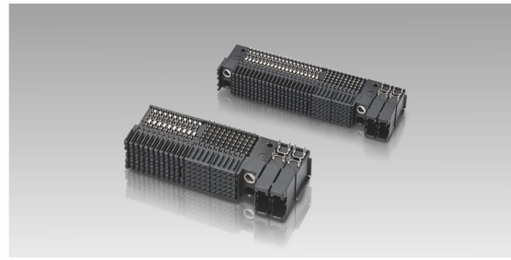
High Speed Backplane Connector

Material
Signal Contact: Copper Alloy
Ground Contact: Copper Alloy
Housing: Liquid Crystal Polymer UL 94 V-0
Plating: 30" Ni
Compliant Pin Plating: RoHS

Feature
Temperature Range: –65 °C to 90 °C
Current Rating: 0.5 A/contact at <30 °C
Durability: 200 cycles
Voltage: 560 VAC
Operating Voltage: 250 VAC

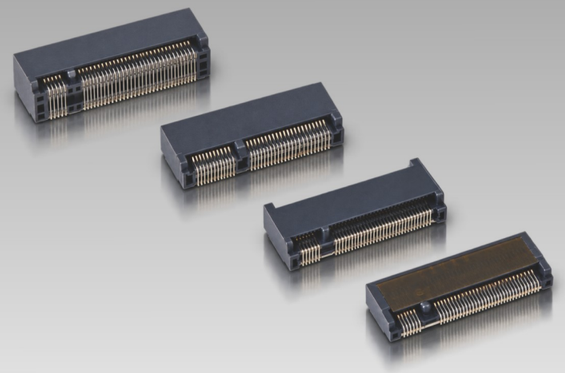
Signal
Impedance: Differential @100 Ω ± 10%
Crosstalk: Multi-pair Differential crosstalk 2.1% @50ps
Insertion Loss: –2 dB at 10 GHz

Specification
10+ Gbps performance
100 Ω impedance
max. 66 differential pairs/inch
50 Gbps @IB HDR
56.1 Gbps @128GFC





Card Edge Product Family: M.2



Mechanical Performance

1. Insertion force (module to connector): 25 N max.
2. Terminal retention force: 100 gf min.
3. Durability: 25cycles

Electrical Performance

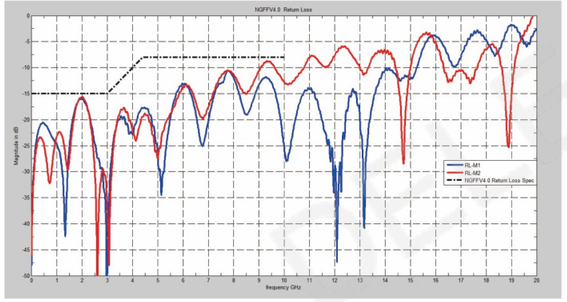
1. Low level contact resistance: 55mΩ initial, △20mΩ
2. Insulation resistance: 100 MΩ min.
3. Dielectric withstanding voltage: 300 VAC.
4. Current rating: 0.5 A/pin De-rate

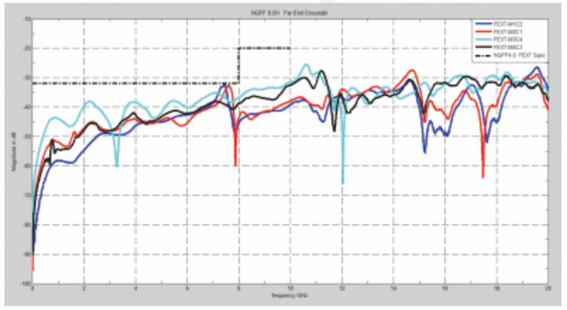
Environmental

1. Flammability: UL 94 V-0
2. Low halogen: 1000ppm max. Cl, 1000ppm max. Br.
3. Compliant with RoHS directive 2011/65/EU
4. Operating Temperature: –40 ℃ to +80 ℃

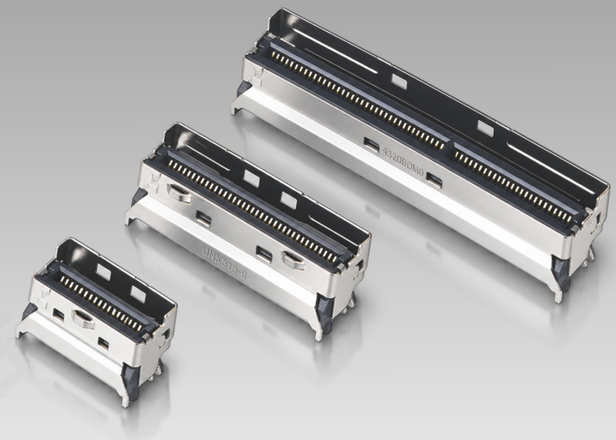
Specification

1. PCI Express M.2 SPEC:
2. DELEC PRODUCT SPEC: DE-PS-0024





Internal High speed IO Series: MCIO (4X/8X/16X)



Mechanical Performance

1. Insertion force: 1.15 N/Pair max.
2. Unmating force: 0.10 N/Pair min.
3. Terminal retention force: 200 gf min.

Electrical Performance

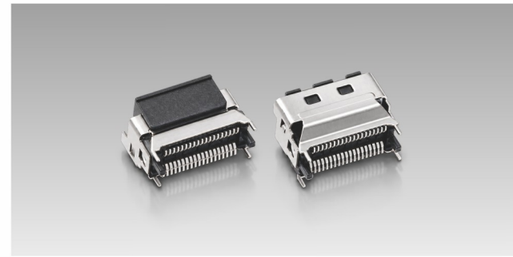
1. Low level contact resistance: 20mΩ initial, △10mΩ
2. Insulation resistance: 1000 MΩ min.
3. Dielectric withstanding voltage: 300 VAC.
4. Current rating: 1.0 A/pin De-rate

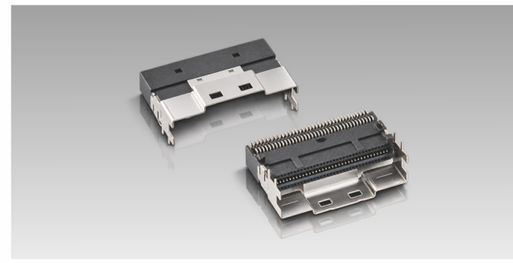
Environmental

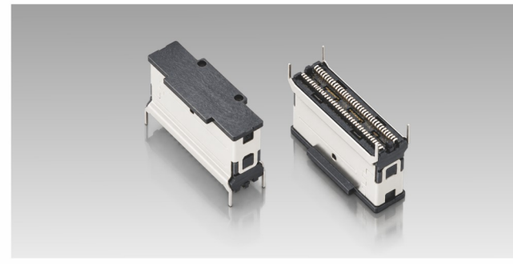
1. Flammability: UL 94 V-0
2. Low halogen: 1000ppm max. Cl, 1000ppm max. Br.
3. Compliant with RoHS directive 2011/65/EU
4. Operating Temperature: –55 ℃ to +85 ℃

Specification

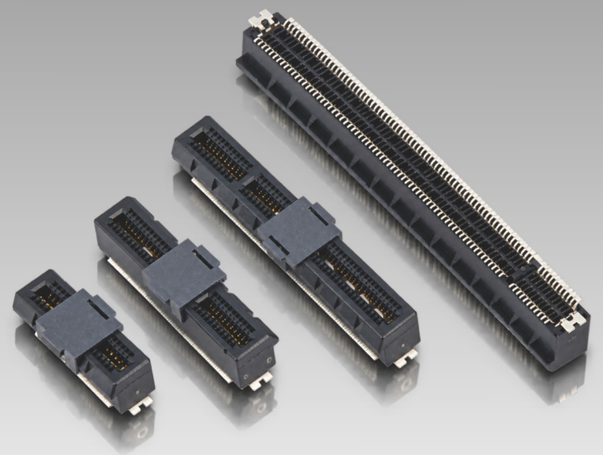
1. DELEC SPEC:
Industry specification SFF-TA-1016
2. DELEC PRODUCT SPEC:
DE-PS-0088







Card Edge Product Family: PCI Express5.0 (X1/X4/X8/X16)



Mechanical Performance

1. Insertion force (module to connector): 1.15 N/Pair max.
2. Unmating force: 0.15 N/Pair min.
3. Terminal retention force: 200 gf min.
4. Durability: 50cycles.

Electrical Performance

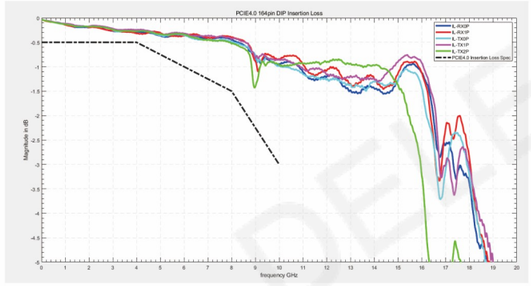
1. Low level contact resistance: 30mΩ initial, △10mΩ
2. Insulation resistance: 1000 MΩ min.
3. Dielectric withstanding voltage: 500 VAC.
4. Current rating: 1.0 A/pin De-rate

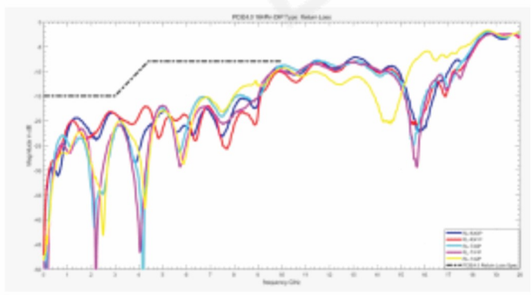
Environmental

1. Flammability: UL 94 V-0
2. Low halogen: 1000ppm max. Cl, 1000ppm max. Br.
3. Compliant with RoHS directive 2011/65/EU
4. Operating Temperature: –40 °C to +85 °C

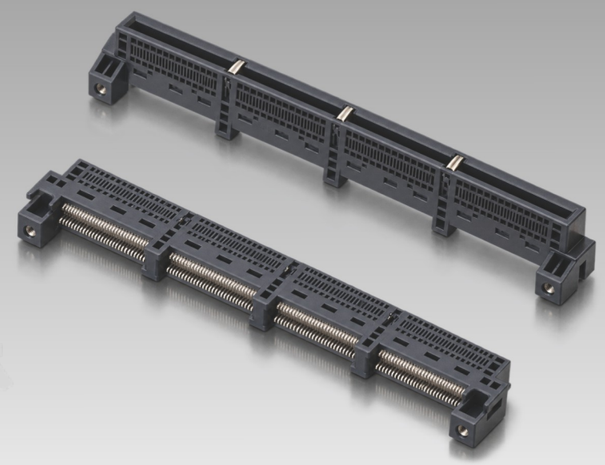
Specification

1. PCI Express card electromechanical specification
2. DELEC PRODUCT SPEC:
DE-PS-0088





Card Edge Product Family: SLIVER 224CKTS STRADDLE MOUNT



Mechanical Performance

1. Insertion force (AIC to connector): 1.1 N/pair max.
2. Unmating force: 0.1 N/pair min.
3. Durability: 25cycles.

Electrical Performance

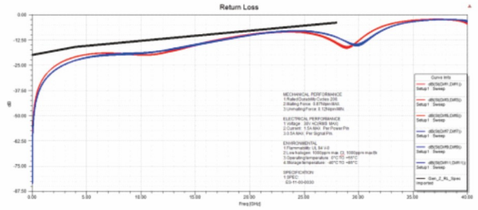
1. Low level contact resistance: 30mΩ initial, △15mΩ
2. Insulation resistance: 100MΩ min.
3. Dielectric withstanding voltage: 300 VAC.
4. Current rating: 1.1 A/pin De-rate

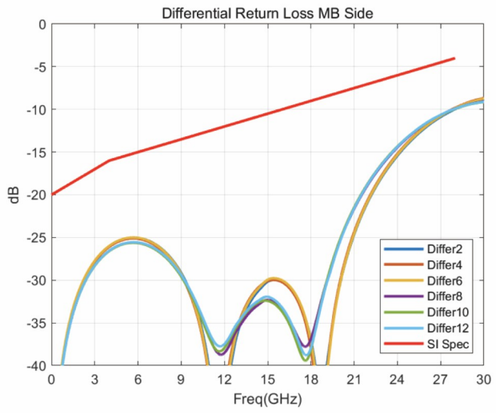
Environmental

1. Flammability: UL 94 V-0
2. Low halogen: 1000ppm max. Cl, 1000ppm max. Br.
3. Compliant with RoHS directive 2011/65/EU
4. Operating Temperature: –55 °C to +85 °C
5. Thermal Shock: 5 cycles between –55 °C and +85 °C
6. Temperature life: 105 °C for 168 hours.

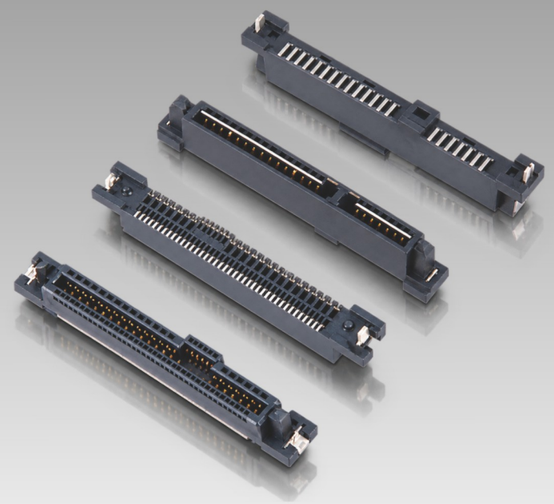
Specification

1. SPEC:
SFF-TA-1002





U.3 Connector (SAS 3.0 7+15PIN/SAS 3.0/SAS 4.0/SAS 5.0)



Mechanical Performance

1. Rated Durability Cycles 200.
2. Mating Force: 0.87 N/pin max.
3. Unmating Force: 0.12 N/pin min.

Electrical Performance

1. Voltage: 30 V AC (RMS max.)
2. Current: 1.5 A max. per power pin, 0.5 A max. per signal pin.

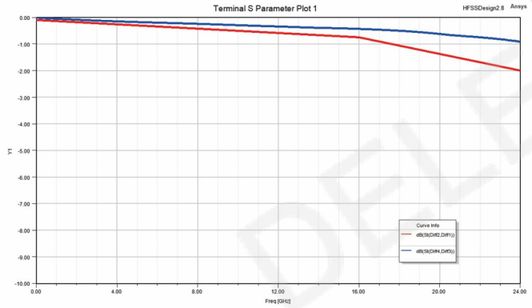
Environmental

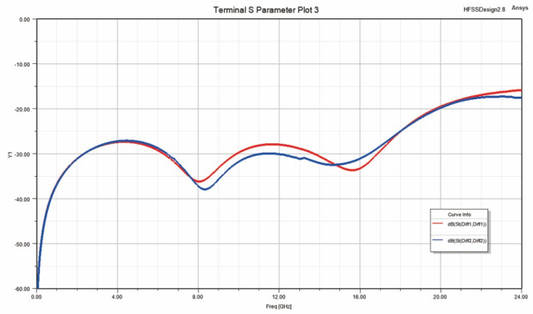
1. Flammability: UL 94 V-0
2. Low halogen: 1000ppm max. Cl, 1000ppm max. Br.
3. Operating Temperature: 0 ℃ to +55 ℃
4. Storage Temperature: –40 ℃ to +85 ℃

Specification

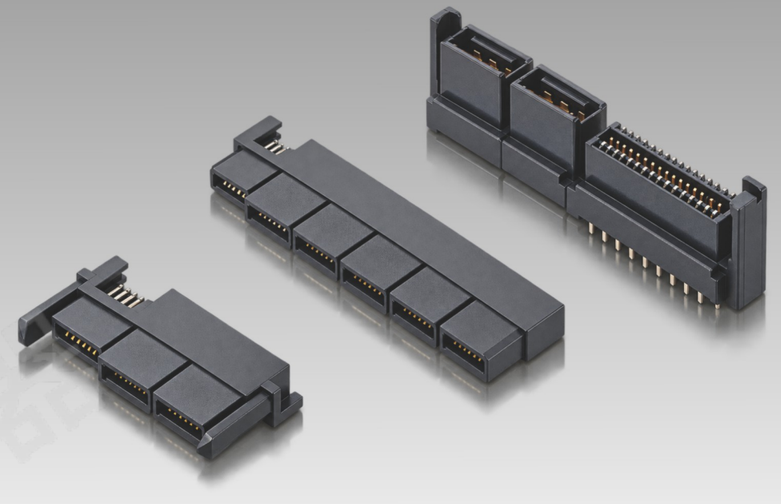
1. SPEC:

ES-11-00-0030





EXTreme LPHPower Connector/Hybrid Right-Angle Receptacles



Mechanical Performance

1. Mating Force (max. per circuit):
Power Contacts - 6.87 N (1.54 lb.)
Signal Contacts - 1.08 N (0.24 lb.)
2. Unmating Force (min. per circuit):
Power Contacts - 1.47 N (0.33 lb.)
Signal Contacts - 0.15 N (0.03 lb.)
3. Durability: 250 cycles (receptacle and plug)

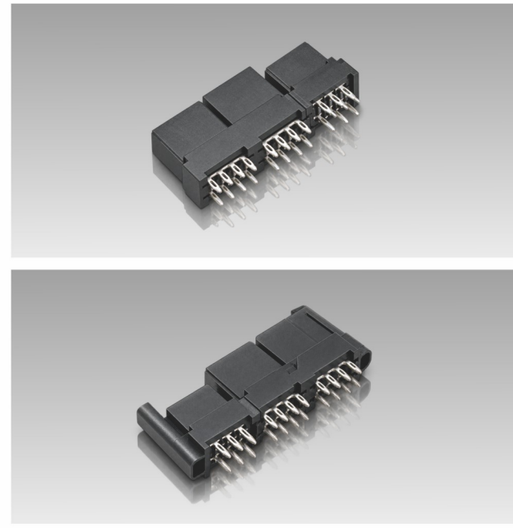
Electrical Performance

1. Voltage: 250 V max.
2. Current (at a 30 ℃ temperature rise):
Power: 30.0 A max.
Signal: 1.0 A max.
3. Contact Resistance (per contact):
Power: 0.11 mΩ min., 0.02 mΩ max.
Signal: 0.35 mΩ min., 0.47 mΩ max.
4. Dielectric Withstanding Voltage: 1,500 V
5. Insulation Resistance (min.): 5,000 MΩ
6. Current interruption:
Power - 30.0 A and 48 V DC
Signal - 1.0 A at 30 V

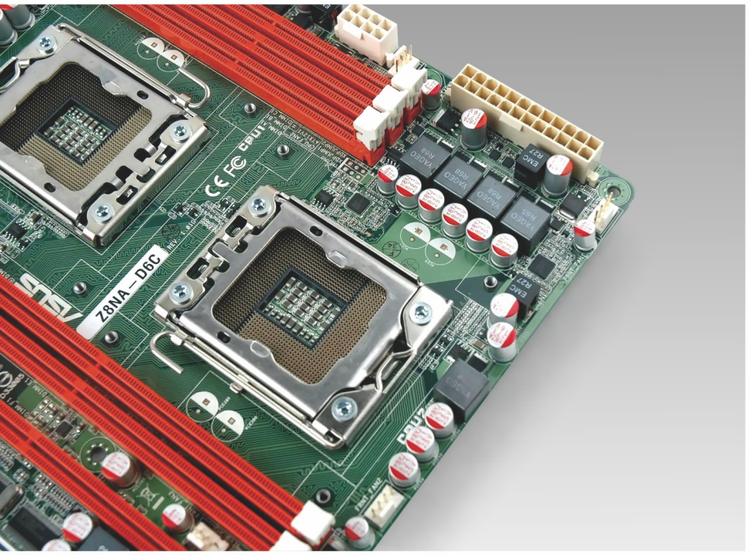
Physical

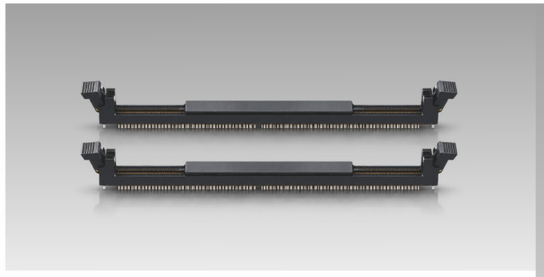
1. Housing: LCP
2. Contact:
Power Contacts -Copper (Cu) alloy
Signal Contacts-Copper (Cu) Alloy
3. Plating:
Contact Area-Select Gold Solder Tail Area - Tin Underplating-Nickel
Flammability Rating: UL 94 V-0
Operating Temperature: –40 ℃ to +105 ℃

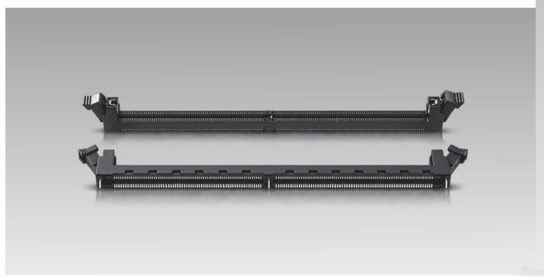




Card Edge Product Family: DDR DIMM/DDR SO DIMM







Mechanical Performance

1. Insertion force (module to connector): 106.8 N max.
2. Terminal retention force: 300 gf min.
3. Durability: 25cycles.

Electrical Performance

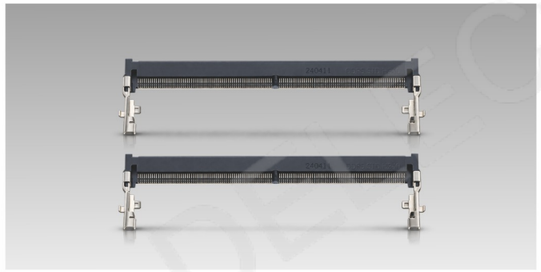
1. Low level contact resistance: 10mΩ initial, △10mΩ
2. Insulation resistance: 1 MΩ min.
3. Dielectric withstanding voltage: 250 VAC.
4. Current rating: 0.75 A/pin De-rate

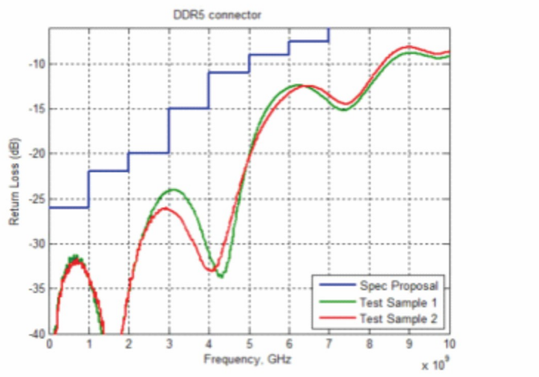
Environmental

1. Flammability: UL 94 V-0
2. Low halogen: 1000ppm max. Cl, 1000ppm max. Br.
3. Compliant with RoHS directive 2011/65/EU
4. Operating Temperature: –55 ℃ to +85 ℃

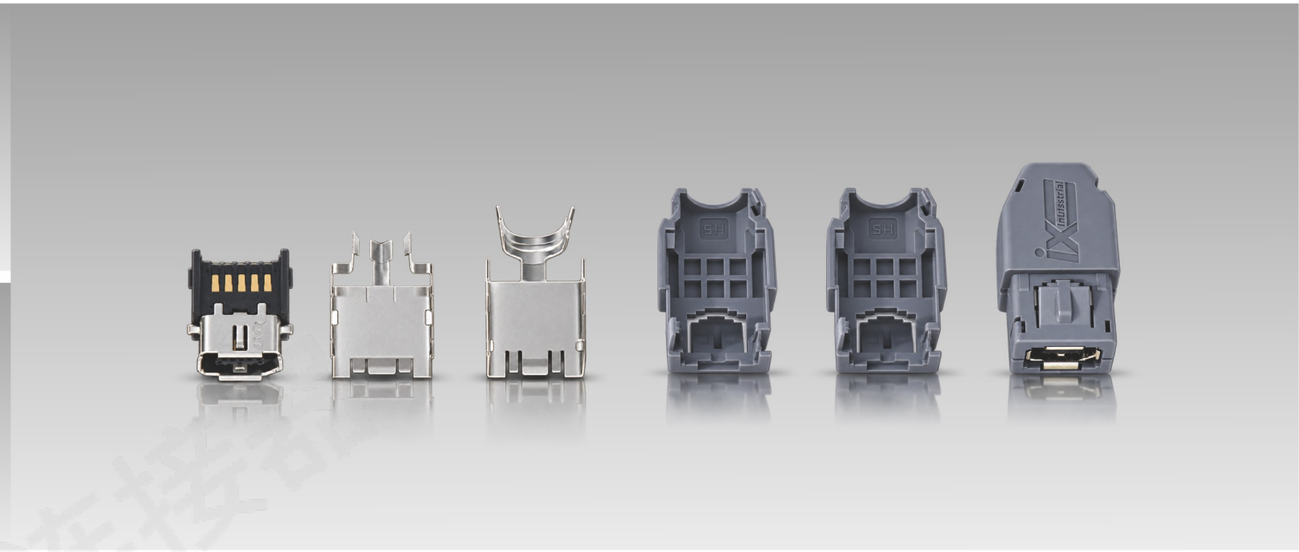
Specification

1. DELEC SPEC:
DDR4 288pin: SO-016 (DIP), SO-018(SMT)
/MO-309 (Module)
DDR5 288pin: SO-023/MO-369
2. DELEC PRODUCT SPEC:
DDR4: DE-PS-0046
DDR5: DE-PS-0115





IX Series Connector (Industrial Transmission connector)

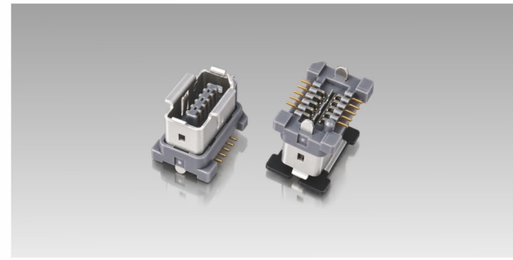


Material

1. RoHS COMPLIANT PER EU DIRECTIVE 2011/65/EU AND AMENDMENTS.
2. STAINLESS STEEL, MATTE TIN OVER NICKEL PLATED.
3. INSERTS: HIGH TEMPERATURE RESISTANT ENGINEERING
THERMOPLASTIC, GLASS REINFORCED, UL94 V-0.
4. CONTACTS: COPPER ALLOY PLATED WITH GOLD OR PALLADIUM-NICKEL
(SEE ORDERING CODE)
OVER 1.27μm (50μ") MINIMUM NICKEL ON THE MATING AREA AND MATTE TIN OVER
NICKEL ON THE SMT TAILS. CODE 4 MATING AREA PLATING 1.27μm (50μ") GOLD
OPTION CONFORMS to ASTM B488, TYPE 2, CODE C, CLASS 1.25.
MID-PLATE: STAINLESS-STEEL

Specification

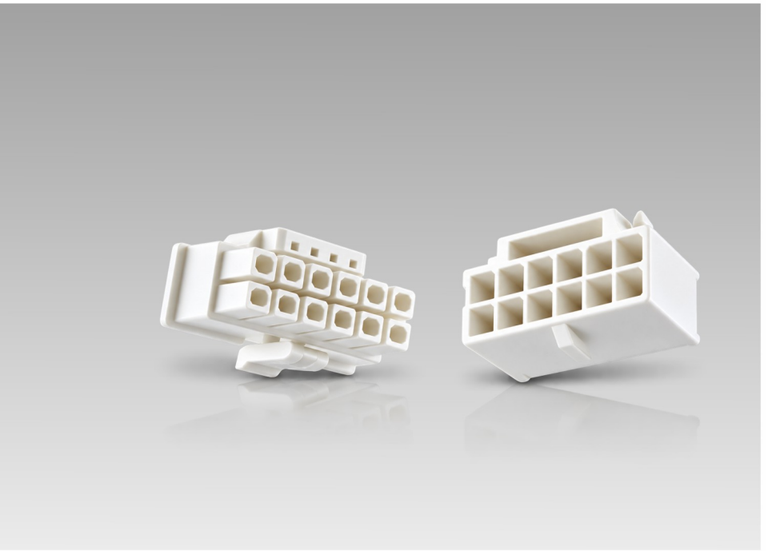
1. CONNECTORS ARE PROVIDED IN TAPE & REEL PACKAGING FOR PICK & PLACE
PROCESSING AND ARE SUITABLE FOR IR REFLOW SOLDERING OF PIN IN PASTE SHIELD
TAILS AND SURFACE MOUNT CONTACT TAILS.
2. DESIGNED to CONFORM to REQUIREMENTS OF IEC 61076 PART 3-124 SPECIFICATION.
THE A KEY FEATURE SHOWN IS INTENDED FOR USE WITH ETHERNET APPLICATIONS,
EITHER 10/100 MBit/S OR 1 to 10 GBit/S (CAT 5e, 6 & 6 A).
3. CURRENT RATING:
1.5 A PER POSITION (30° max. TEMPERATURE RISE PER UL1977 &
CSA C22.2 NO 182.3 STANDARDS) VOLTAGE RATING: 50 V AC rms OR 60 V DC
4. OPERATING TEMPERATURE -55° to +105 °C.
5. DIELECTRIC WITHSTANDING VOLTAGE: 500 V DC
6. CONTACT RESISTANCE: 30 mΩ MAXIMUM.
7. INSULATION RESISTANCE: 500 MΩ MINIMUM.
8. MATING & UNMATING FORCE: 25 N (5.6 lbf) MAXIMUM.







Micro-Fit+ System Connector

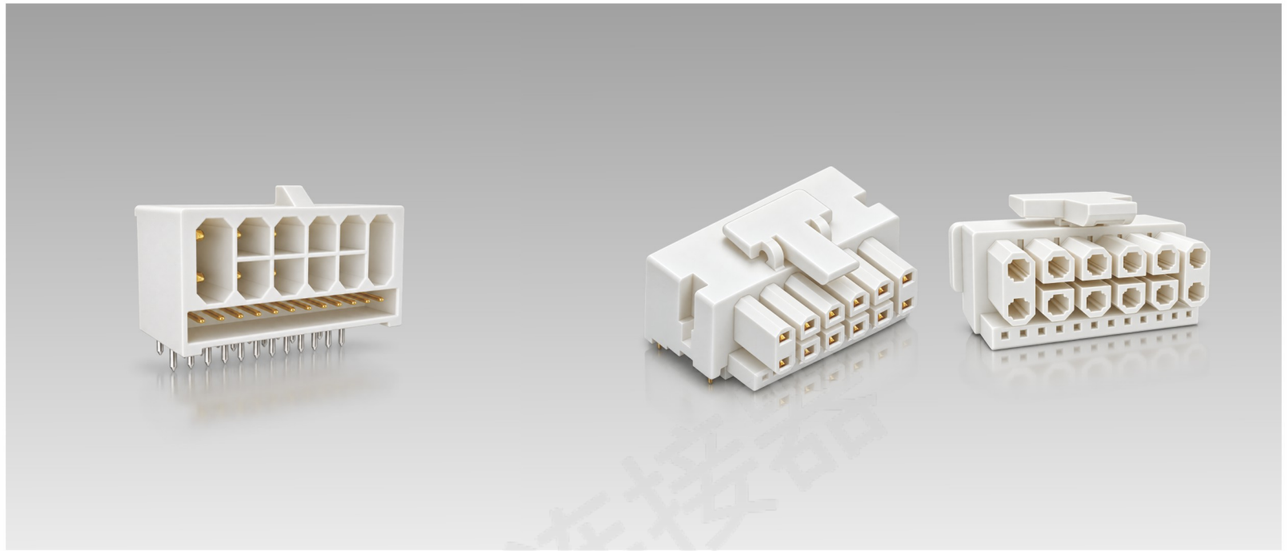


Micro-Fit+ OCP M-PIC 12 V (P12S12 + P6S6) Connectors

Reference Information
Packaging: Bag, tray, reel
File: CSA、UL
Use With:
Receptacle
Power Terminal
Signal terminal
Header
Mates With:
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes
Glow Wire Capable: Yes

Electrical
Power Contacts: 13.5 A per pin
Signal Contacts: 1.0 A per pin (same as existing Micro-Fit+ 12v-2x6)
Low Level Contact Resistance:
Power Terminal: 5 mΩ
Signal Terminal: 20 mΩ
Insulation Resistance (min.): 1,000 MΩ
Voltage (max.): 250 V AC/DC
Current (max.): 13.5 A (power)/1.0 A (signal)
Dielectric Withstand Voltage: 1,500 V AC
Temperature Rise: 30 °C
4 signal contacts rated to 1.0 A
Fully isolated terminals
Positive locking on housing with low thumb latch operation

Physical
Header: Liquid crystal polymer, UL 94 V-0, black
Header Pin: High copper alloy, tin plating
Receptacle: Nylon, UL 94 V-0, low halogen, black
Power Terminal: High-current copper alloy
Signal Terminal: Phosphorous bronze

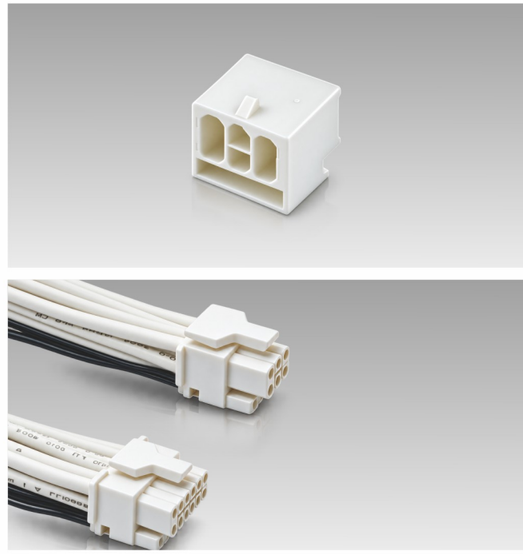


Micro-Fit+ PCIe 12 V-2x6 Connectors

Electrical
Power Terminal: 5 mΩ Signal Terminal: 20 mΩ
Insulation Resistance (min.): 1,000 MΩ
Voltage (max.): 600 V AC/DC
Current (max.): 9.5 A (Power)/1 A (Signal)
Dielectric Withstand Voltage: 1,500 V AC
Temperature Rise: 30 °C max.
Rated current up to 9.5 A per contact with all 12 power contacts energized
4 signal contacts rated to 1.0 A
Fully isolated terminals
Positive locking on housing with low thumb latch operation

Physical
Header: Liquid crystal polymer, UL 94 V-0, black
Header Pin: High copper alloy, tin plating
Receptacle: Nylon, UL 94 V-0, low halogen, black
Power Terminal: High-current copper alloy
Signal Terminal: Phosphorous bronze

OCP M-PIC Connector



OCP M-PIC CONNECTOR

The newly introduced PICPWR 2x6+12SB or 2x3+6SB auxiliary power connector and cable assembly supports power distribution of 864 W (2x6) or 486 W (2x3) within the HPM and between the HPM and peripheral subsystems. M-PIC connectors provide a hybrid power/signal solution for various server-system architectures, including Open Compute Project (OCP) Open Rack v3 and Modular Hardware Systems (DC-MHS).

1. Rated current up to 12 A for 2X6+12SB and 13.5 A for 2X3+6SB with all power contacts
2. Fully isolated terminals
3. Positive locking on housing with low thumb latch operation

Features
1. High current alloy material used for contacts
2. Fully isolated terminals
3. Positive locking on housing with low thumb latch operation
4. Fully polarized housing
5. High retention force in housing
6. UL 94 V-0 flammability rated Nylon material
7. RoHS compliant and lead-free

Benefits
1. Rated up to 12 A (2x6)/13.5 A (2x3) per contact with all contacts loaded
2. Prevents terminals from potential damage during operation
3. Ensures secured mating retention
4. Prevents accidental misseating
5. Well secured terminals in housing
6. High flammability rating
7. Meets environmental, health, and safety Requirements

Description
Dual Row Board Headers
PICPWR OCP® Right Angle header
PICPWR OCP® Vertical Header
Dual Row Board Receptacle
PICPWR OCP® Right Angle Board Receptacle with Latch
PICPWR OCP® Right Angle Board Receptacle Without Latch
Dual Row cable housings
Receptacle Housing
Terminals
Receptacle Terminal (Pwr)-16 AWG
Receptacle Terminal (Pwr)-14 AWG
Receptacle Terminal (Signal)

Technical Information

Material
1. Housing: LCP, Black (UL 94 V-0)
2. Signal Terminal: Copper Alloy with Nickel under plate and Gold plating
3. Power Terminal: Copper Alloy with Nickel under plate and Gold plating

Mechanical Performance- BTB Connectors
1. Insertion Force: 35 N max.
2. Withdrawal Force: 8 N min.
3. Durability: 30 mating cycles

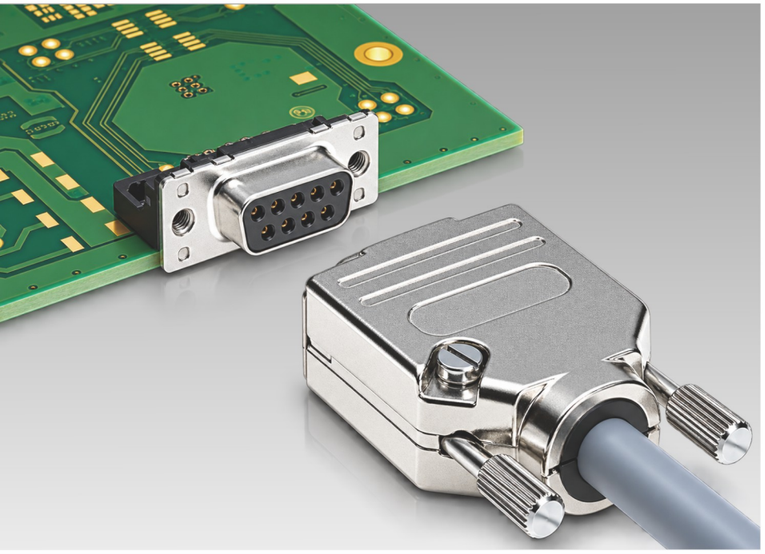
Packaging
1. PCB Header: Tray, Tape & Reel
2. Cable Housing: Bulk
3. Terminal: Reel

Mechanical Performance- WTB Connectors
1. Insertion Force PWR: 5.6 N max.
2. Insertion Force Side Band: Insertion force: 3.0 N max.
3. Withdrawal Force PWR: 1.5 N min.
4. Withdrawal Force Side Band: 0.2 N max.
5. Durability: 30 mating cycles
6. Wire Pullout Force: Refer to product specifications

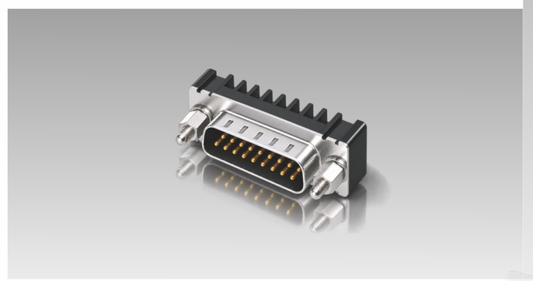
Electrical Performance
1. Low Level Contact Resistance:
PWR: 5 mΩ max.
Side Band: 10 mΩ max.
2. Insulation Resistance: 1000 MΩ min.
3. Voltage Rating PWR: 600 V AC/V DC
4. Voltage Rating Signal: 100 V AC/V DC
5. Current Rating: 12 A (2x6)/13.5 A (2x3)
6. Dielectric Withstand Voltage: 2200 V AC
7. Temperature Rise: 30 °C max.

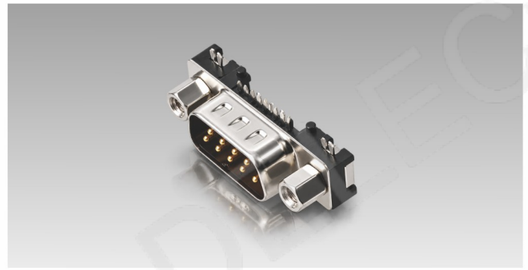
Environmental
1. Operating Temperature Range: -40 °C to +105 °C
2. Includes 30 °C terminal temperature rise at rated current

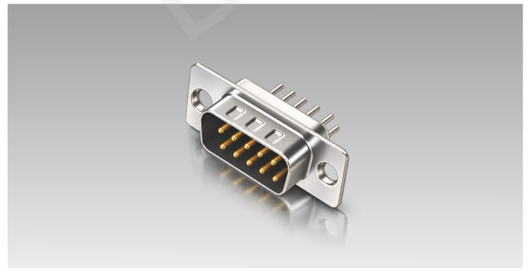
D-SUB Series Connector

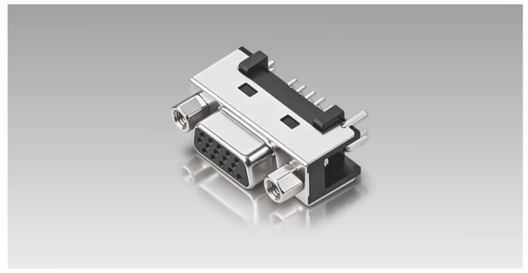












D-SUB Series

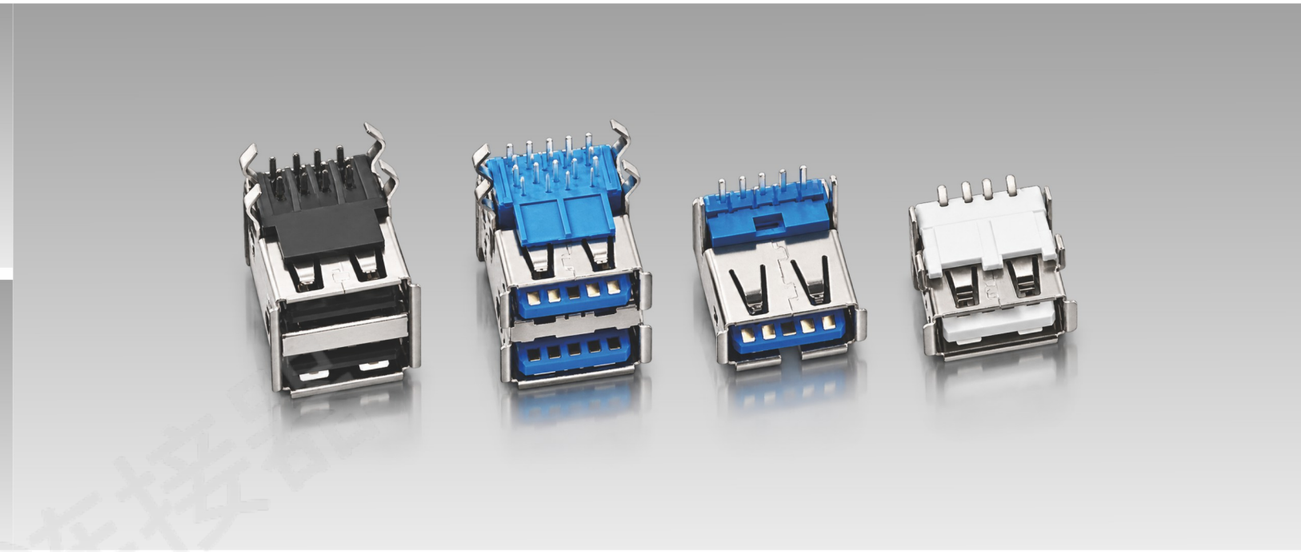
Materials

Insulator: high temperature thermoplastic, UL94 V-0 Blue
Contact terminal: 30 u " Au plated on contact area
50u"min. Matte Tin plated on solder area;
50u"min. Nickel underplating over all.
Crust: SPCC, plated Ni

Specifications

1. Electrical requirements:
Current rating: 1 A
Contact resistance: ≤30mΩ
Insulation resistance: ≥1000MΩ
Withstanding voltage: 500 Vr.m.s, 1mA, 60s
2. Mechanical requirements
Insertion force: ≤3.3 N/pin
Extraction force: ≥0.3 N/pin
Mechanical life: 200 cycles
3. Environment specification
Working Temperature: –40 °C to +100 °C
Humidity: ≤93% at 40 °C
4. Applicable standard: IEC60807
5. Storing:
Storage Condition: –10 °C to +40 °C
below 80% relative humidity
6. Helps prevent environmental pollution.
Complies with the European Union RoHS Directive.

USB & HDMI Series Connector



HDMI Series

Material

1. Housing: LCP + 30% glass fiber, UL 94 V-0, black
2. Contact: Copper alloy, Au- and Sn-plated.
3. Shell: SK7, Ni Plated.

Specifications

Mating Force: 44.1 N (4.5 kgf) max.
Unmating Force: 9.8–39.2 N (1–4 kg).
Durability: 10,000 cycles.

Electrical Characteristic

Current Rating: 0.5 A max.
Voltage Rating: 40 V AC max.
Contact Resistance: 30 mΩ max.
Insulation Resistance:
100 MΩ min. (unmated)
10 MΩ min. (mated)
Dielectric Withstanding Voltage:
500 V AC min.

Temperature
Operating Temperature: –40 °C to +85 °C
Storage Temperature: –60 °C to +105 °C

USB Series

Material

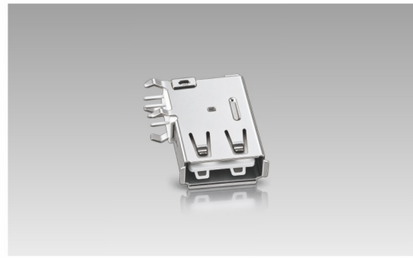
1. Housing: Nylon, PBT(UL94-VO) Color: White, Black,
Blue or other colors are available
2. Contacts: Flat Pin: phosphor bronze plated with
Fu" /3u" /6u" /15u" /30u" min. hard gold plated over nickel.
3. Shielding: brass or spcc with nickel plated.

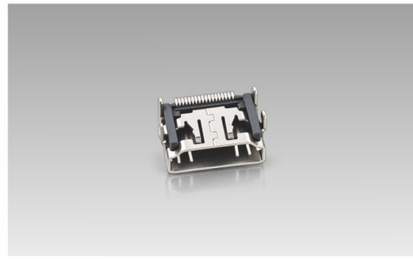
Specifications

Voltage Current Rating:
USB (1 A, 30 VAC)
HDMI (0.5 A, 40 VDC)
Insulation Resistance: 1,000 MΩ min.
Contact Resistance: 30 mΩ max.
Dielectric Withstanding Voltage: 500 V AC

USB2.0: Single USB2.0/Dual USB2.0 (PTH solder type) available
Single USB2.0(SMT solder type) available

USB3.0: Single USB3.0/Dual USB3.0 (PTH solder type) available
Single USB3.0 (SMT solder type) available







Type C Series Connector





Materials

1. HOUSING: LCP (UL 94 V-0), BLACK.
2. TERMINAL: COPPER ALLOY, C18400 T=0.12
GOLD Fu"/3u"/PLATED ON CONTACT AREA.
GOLD FLASH PLATING ON SOLDER TAIL.
NICKEL 50u" UNDERPLATED OVER ALL.
3. MID PLATE: STAINLESS STEEL. SUS301 T=0.15
4. SHELL: STAINLESS STEEL, SUS 301 T=0.30 NICKEL
50u" MIN PLATING
5. EMI: STAINLESS STEEL, SUS 304 T=0.10 NICKEL
50u" MIN PLATING

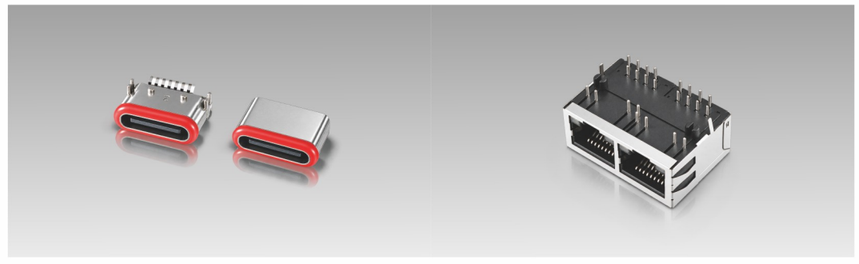
Specifications

1. CURRENT RATING:
5.0 A FOR Vbus PIN,
1.25 A FOR Vconn PIN,
0.25 A FOR OTHER PINS.

2. CONTACT RESISTANCE: 40mΩ.
3. INSULATION RESISTANCE: 100MΩ MIN.
4. DIELECTRIC WITHSTANDING VOLTAGE: 100 VAC MIN.
5. OPERATING TEMPERATURE: -40 ℃ to +85 ℃.
6. MATING FORCE: 5~20 N.
7. UNMATING FORCE: 8~20 N.
8. DURABILITY: 10, 000 CYCLES.
9. RECOMMENDED PROCESS:
THE PEAK TEMPERATURE ON THE BOARD SHALL
MAINTAIN 260 ℃.
10. SALT SPRAY: 48 hour







RJ45 1XN Series Integrated Modules Connector



RJ45 1XN Series

1XN PORT Tab Up/Tab Down 10/100/1000/2.5G/5G Base-T RJ45 Connector

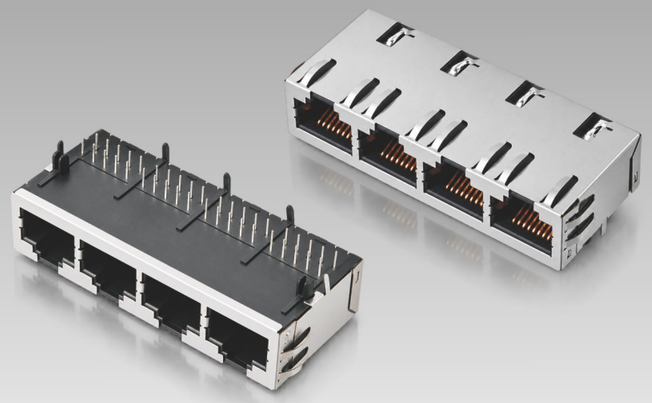
Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black or other colors available
2.Contacts:
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated.
3.Shielding:0.20mm thickness brass with nickel plated.

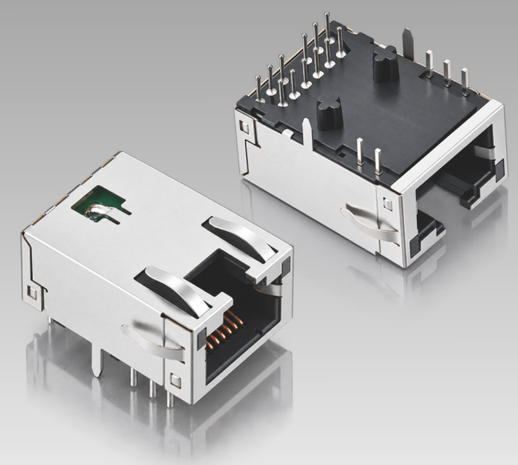
Specification Characteristic
1.Port: 1X1/1X2/1X4
2.Position Number:8 Positions or 10 Positions available
3.Contact Number: 8 Contacts
4.Tab Up or Tab Down available.
5.Shielding: Non-Shielded/Shielded with EMI Finger/Shielded without EMI Finger
6.Magnetics:10/100 Base-T, 10/100/1000 Base-T Schematic available.
7.LED:Without LED/ With LED option (Differnet colors of LED option available)
8.1X1 port Tab up / SMT Type available.

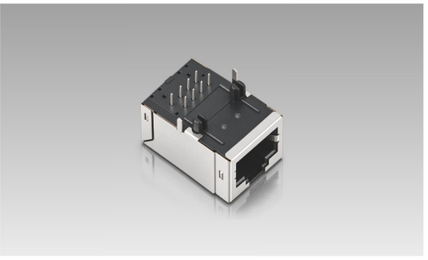
Feature
Shielded RJ45 connector with integrated 10/100 or Gigabit Ethernet
Complies with IEEE802.3 standards
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Integrated design conserves valuable board space.
Minimum interwinding breakdown voltage of 1500Vrms.
Adaptable,modular design provides higher reliability.
Operating temperature:0℃ to +70℃
Storage temperature:-40℃ to +85℃

ELECTRICAL CHARACTERISTICS @ 25°C
10/100 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
1MHz-100MHz -1.1dB MAX.
Return Loss:(Load:100 ohms)
1MHz-30MHz -18dB MIN.
30MHz-60MHz -18+20Log(F/30)dB MIN
60MHz-80MHz -12dB MIN.
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.

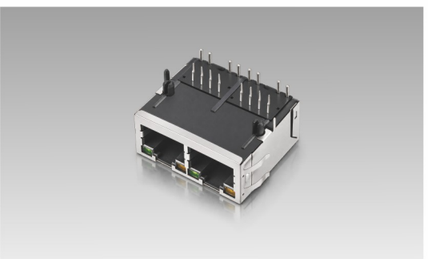
10/100/1000 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC Min.
Insertion Loss:
100KHz-1MHz -1.1dB MAX.
1MHz-65MHz- 0.8dB MAX.
65MHz-100MHz -1.0dB MAX.
100MHz-125MHz -1.2dB MAX.
Return Loss:(Load:100 ohms)
1MHz-40MHz -18dB MIN.
40MHz-100MHz -12+20Log(F/80)dB MIN
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-40MHz -30dB MIN.
40MHz-100MHz -33+20Log(F/50)dB MIN











RJ45 1XN Series

1XN PORT Tab Up/Tab Down 10/100/1000/2.5G/5G Base-T RJ45 Connector

Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black or other colors available
2.Contacts:
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated.
3.Shielding:0.20mm thickness brass with nickel plated.

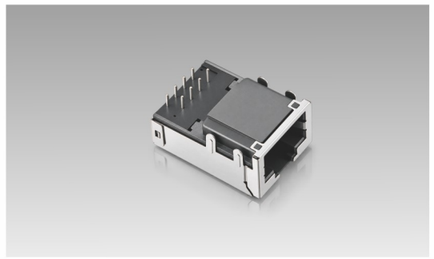
Specification Characteristic
1.Port: 1X1/1X2/1X4
2.Position Number:8 Positions or 10 Positions available
3.Contact Number: 8 Contacts
4.Tab Up available.
5.Shielding: Non-Shielded/Shielded with EMI Finger/Shielded without EMI Finger
6.Magnetics:10/100 Base-T, 10/100/1000 Base-T Schematic available.
7.LED:Without LED/ With LED option (Differnet colors of LED option available)

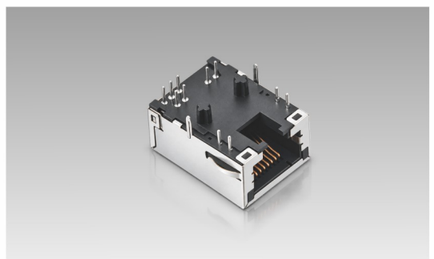
Feature
Shielded RJ45 connector with integrated 10/100 or Gigabit Ethernet
Complies with IEEE802.3 standards
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Integrated design conserves valuable board space.
Minimum interwinding breakdown voltage of 1500Vrms.
Adaptable,modular design provides higher reliability.
Operating temperature:0℃ to +70℃
Storage temperature:-40℃ to +85℃

ELECTRICAL CHARACTERISTICS @ 25°C
10/100 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
1MHz-100MHz -1.1dB MAX.
Return Loss:(Load:100 ohms)
1MHz-30MHz -18dB MIN.
30MHz-60MHz -18+20Log(F/30)dB MIN
60MHz-80MHz -12dB MIN.
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.

10/100/1000 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
100KHz-1MHz -1.1dB MAX.
1MHz-65MHz -0.8dB MAX.
65MHz-100MHz -1.0dB MAX.
100MHz-125MHz -1.2dB MAX.
Return Loss:(Load:100 ohms)
1MHz-40MHz -18dB MIN.
40MHz-100MHz -12+20Log(F/80)dB MIN
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-40MHz -30dB MIN.
40MHz-100MHz -33+20Log(F/50)dB MIN







RJ45 1X1 Series

1XN PORT Tab Up/Tab Down 10/100/1000/2.5G/10G Base-T RJ45 Connector

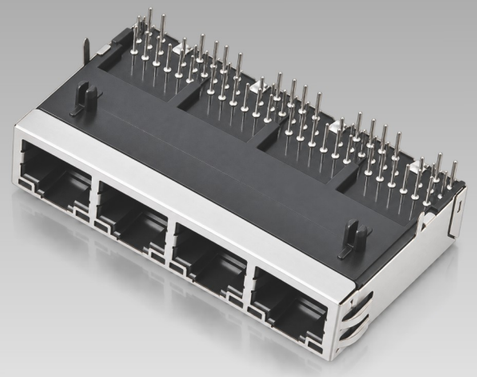
Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black or other colors available
2.Contacts:
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated.
3.Shielding:0.20mm thickness brass with nickel plated.

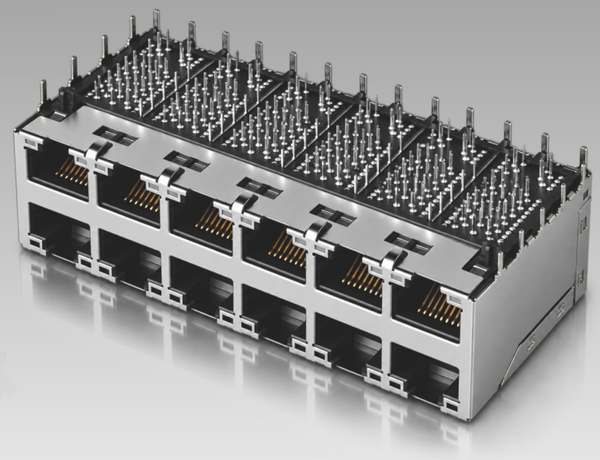
Specification Characteristic
1.Port: 1X1
2.Position Number:8 Positions or 12 Positions available
3.Contact Number: 8 Contacts
4.Tab Up or Tab Down available.
5.Shielding: Shielded with EMI Finger/Shielded without EMI Finger
6.Magnetics:10/100 Base-T, 10/100/1000 Base-T,10G Base-T Schematic available.
7.LED:Without LED/ With LED option (Differnet colors of LED option available)

Feature
Ultra low profile design
Shielded RJ45 connector with integrated 10/100BASE-T or 10/100/100BASE-T or 10GBASE-T Ethernet
Complies with IEEE802.3/IEEE802.3an standards
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Integrated design conserves valuable board space.
Minimum interwinding breakdown voltage of 1500Vrms.
Adaptable,modular design provides higher reliability.
Operating temperature:0℃ to +70℃
Storage temperature:-40℃to +85℃

ELECTRICAL CHARACTERISTICS @ 25°C
10/100/1000 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
1MHz-100MHz -1.1dB MAX.
Return Loss:(Load:100 ohms)
1MHz-30MHz -18dB MIN.
30MHz-60MHz -18+20Log(F/30)dB MIN
60MHz-80MHz -12dB MIN.
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.

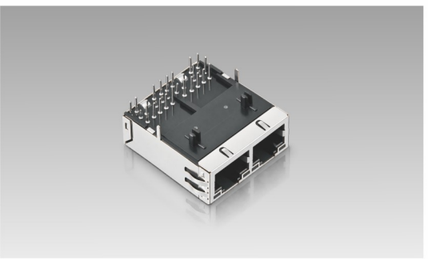
10G BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
120uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
1MHz-20MHz -0.8dB MAX.
50MHz -1.0dB MAX.
200MHz -1.2dB MAX.
400MHz -2.0dB MAX.
500MHz -3.0dB MAX.
Return Loss: (Load:100 ohms)
1MHz-40MHz -22dB MIN.
40MHz-100MHz -20dB MIN.
100MHz-200MHz -18dB MIN.
200MHz-300MHz -15dB MIN.
300MHz-400MHz -10dB MIN.
400MHz-500MHz -8dB MIN.
CM to CM Rejection:
1MHz-500MHz -20dB MIN.
CM to DM Rejection:
1MHz-250MHz -30dB MIN.
250MHz-500MHz -22dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.
100MHz-500MHz -20dB MIN











RJ45 1XN Series

1XN PORT Tab Up/Tab Down 10/100/1000/2.5G/5G
Base-T RJ45 Connector
With POE/POE+/UPOE/POE++ Options

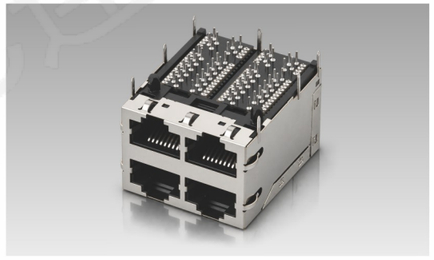
Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black or other colors available
2.Contacts:
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated.
3.Shielding:0.20mm thickness brass with nickel plated.

Specification Characteristic
1.Port: 1X1/1X2/1X4
2.Position Number:8 Positions or 10 Positions available
3.Contact Number: 8 Contacts
4.Tab Up or Tab Down available.
5.Shielding: Non-Shielded/Shielded with EMI Finger/Shielded without EMI Finger
6.Magnetics:10/100 Base-T, 10/100/1000 Base-T Schematic available.
7.LED:Without LED/ With LED option (Differnet colors of LED option available)

Feature
Shielded RJ45 connector with integrated 10/100 or Gigabit Ethernet
Complies with IEEE802.3 standards
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Integrated design conserves valuable board space.
Minimum interwinding breakdown voltage of 1500Vrms.
Adaptable,modular design provides higher reliability.
Operating temperature:0℃ to +70℃
Storage temperature:-40℃ to +85℃

ELECTRICAL CHARACTERISTICS @ 25°C
10/100 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
1MHz-100MHz -1.1dB MAX.
Return Loss:(Load:100 ohms)
1MHz-30MHz -18dB MIN.
30MHz-60MHz -18+20Log(F/30)dB MIN
60MHz-80MHz -12dB MIN.
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.

10/100/1000 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
100KHz-1MHz -1.1dB MAX.
1MHz-65MHz -0.8dB MAX.
65MHz-100MHz -1.0dB MAX.
100MHz-125MHz -1.2dB MAX.
Return Loss:(Load:100 ohms)
1MHz-40MHz -18dB MIN.
40MHz-100MHz -12+20Log(F/80)dB MIN
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-40MHz -30dB MIN.
40MHz-100MHz -33+20Log(F/50)dB MIN







RJ45 2XN Series

Stacked Ports 10/100/1000/2.5G/5G/10G
Base-t RJ45 Modules
With POE/POE+/UPOE/POE++ Options

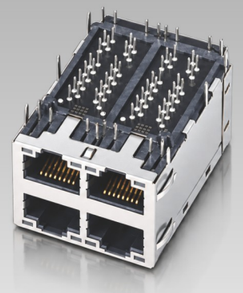
Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black
2.Contacts:Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Minhard gold plated.
3.Shielding:0.20mm thickness brass with nickel plated.

Specification Characteristic
1.Port: 2X1,2X2,2X4,2X6,2X8
2.Position Number:10 or 12 Positions available
3.Contact Number: 8 Contacts
4.Shielding:Shielded with EMI Finger/Shielded without EMI Finger
6.Magnetics:10/100 Base-T, 10/100/1000 Base-T ,POE , POE Plus Schematic available.
7.ESD/Surge Protection option.
8.LED:Without LED/ With Back LED option (Differnet colors of LED option available)

Feature
Shielded RJ45 connector with integrated 10/100 or Gigabit Ethernet
Complies with IEEE802.3af/at standards
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Integrated design conserves valuable board space.
Minimum interwinding breakdown voltage of 1500Vrms.
Adaptable,modular design provides higher reliability.
Operating temperature:0℃ to +70℃
Storage temperature:-40℃ to +85℃

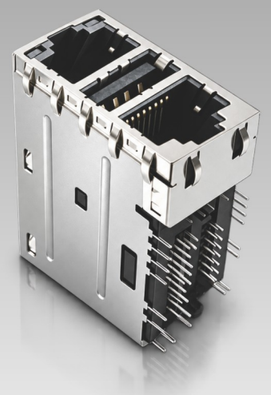
ELECTRICAL CHARACTERISTICS @ 25°C
10/100 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Input to Output isolation 2250VDC.
Insertion Loss:
1MHz-100MHz -1.1dB MAX.
Return Loss:(Load:100 ohms)
1MHz-30MHz -18dB MIN.
30MHz-60MHz -18+20Log(F/30)dB MIN
60MHz-80MHz -12dB MIN.
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.

10/100/1000 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Input to Output isolation 2250VDC.
Insertion Loss:
100KHz-1MHz -1.1dB MAX.
1MHz-65MHz -0.8dB MAX.
65MHz-100MHz -1.0dB MAX.
100MHz-125MHz -1.2dB MAX.
Return Loss:(Load:100 ohms)
1MHz-40MHz -18dB MIN.
40MHz-100MHz -12+20Log(F/80)dB MIN
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-40MHz -30dB MIN.
40MHz-100MHz -33+20Log(F/50)dB MIN
Balanced DC Line current/Voltage rating(PSE Pins)
720mA Maximum @ 57V Continuous

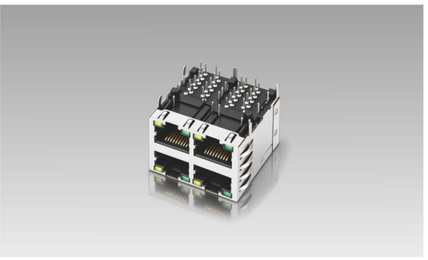


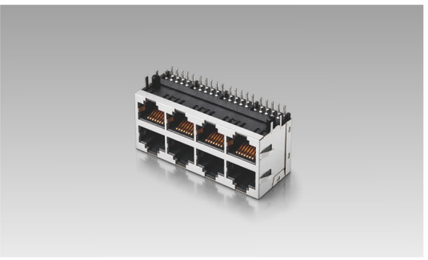












RJ45 2XN Series

Stacked Ports 10/100/1000/2.5G/5G
Base-t RJ45 Modules
With POE/POE+/UPOE/POE++ Options

Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black
2.Contacts:
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated.
3.Shielding:0.20mm thickness brass with nickel plated.

Specification Characteristic
1.Port:2X4,2X6,2X8
2.Position Number:12 Positions available
3.Contact Number: 8 Contacts
4.Shielding:Shielded with EMI Finger/Shielded without EMI Finger
6.Magnetics:10/100 Base-T,POE , POE Plus Schematic available.
7.LED:Without LED/ With Front LED option (Differnet colors of LED option available)

Feature
Shielded RJ45 connector with integrated 10/100 POE/POE Plus Ethernet
Complies with IEEE802.3af/at standards
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Integrated design conserves valuable board space.
Minimum interwinding breakdown voltage of 1500Vrms.
Adaptable,modular design provides higher reliability.
Operating temperature:0℃ to +70℃
Storage temperature:-40℃ to +85℃

ELECTRICAL CHARACTERISTICS @ 25°C
10/100 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
1MHz-100MHz -1.1dB MAX.
Return Loss:(Load:100 ohms)
1MHz-30MHz -18dB MIN.
30MHz-60MHz -18+20Log(F/30)dB MIN
60MHz-80MHz -12dB MIN.
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.

10/100/1000 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
100KHz-1MHz -1.1dB MAX.
1MHz-65MHz -0.8dB MAX.
65MHz-100MHz -1.0dB MAX.
100MHz-125MHz -1.2dB MAX.
Return Loss:(Load:100 ohms)
1MHz-40MHz -18dB MIN.
40MHz-100MHz -12+20Log(F/80)dB MIN
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-40MHz -30dB MIN.
40MHz-100MHz -33+20Log(F/50)dB MIN







RJ45+USB & RJ45 Vertical Series

RJ45+USB2.0/3.0 & 10/100/1000/2.5G/5G
Base-T Connector

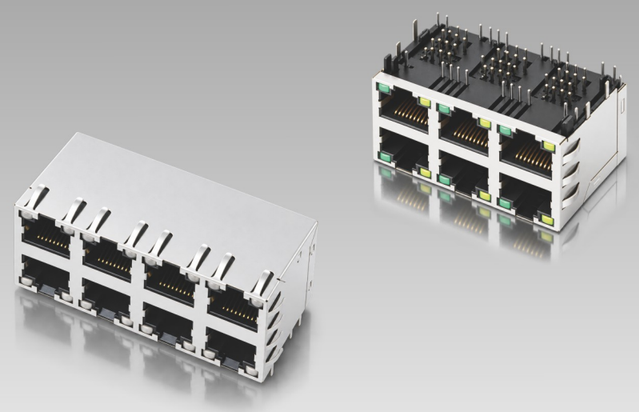
Material
1.Housing:Nylon,PBT(UL94-V0)
2.Contacts:
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated.
3.Shielding:0.20mm thickness brass with nickel plated.

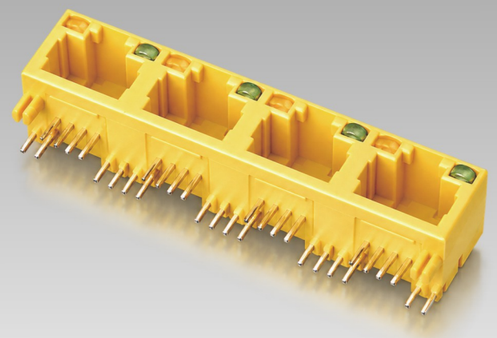
Specification Characteristic
1.Port: 1X1
4.DE68 Vertical 180 Degree type design/ DE67 RJ45 with USB Combination
5.Shielding:Shielded with EMI Finger/Shielded without EMI Finger
6.Magnetics:10/100 Base-T, 10/100/1000 Base-T Schematic available.
7.LED:Without LED/ With LED option (Differnet colors of LED option available)
8.RJ45 with single USB2.0/ RJ45 with single USB3.0. available
RJ45 with dual USB3.0/ RJ45 with dual USB3.0. available

Feature
Shielded RJ45 connector with integrated 10/100 or Gigabit Ethernet
Complies with IEEE802.3 standards
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Integrated design conserves valuable board space.
Minimum interwinding breakdown voltage of 1500Vrms.
Adaptable,modular design provides higher reliability.
Operating temper ature:0℃ to +70℃
Storage temperature:-40℃ to +85℃

ELECTRICAL CHARACTERISTICS @ 25°C
10/100 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
1MHz-100MHz -1.1dB MAX.
Return Loss:(Load:100 ohms)
1MHz-30MHz -18dB MIN.
30MHz-60MHz -18+20Log(F/30)dB MIN
60MHz-80MHz -12dB MIN.
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-100MHz -30dB MIN.

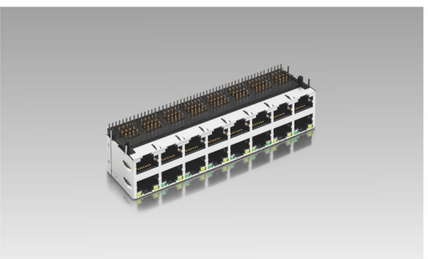
10/100/1000 BASE-T Product
Turn Ratio: 1:1±3%.
Primary Inductance:
350uH MIN.@100KHz,100mVRMS,8mA DC BIAS.
Hi-Pot(Isolation Voltage):
Iput to Output isolation 1500Vrms/2250VDC.
Insertion Loss:
100KHz-1MHz -1.1dB MAX.
1MHz-65MHz -0.8dB MAX.
65MHz-100MHz -1.0dB MAX.
100MHz-125MHz -1.2dB MAX.
Return Loss:(Load:100 ohms)
1MHz-40MHz -18dB MIN.
40MHz-100MHz -12+20Log(F/80)dB MIN
CM to CM Rejection:
1MHz-100MHz -30dB MIN.
CM to DM Rejection:
1MHz-100MHz -35dB MIN.
Cross Talk:
1MHz-40MHz -30dB MIN.
40MHz-100MHz -33+20Log(F/50)dB MIN











RJ45 2XN Series

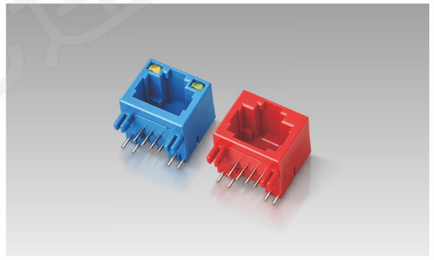
RJ45 Module Jack Without Magnetics

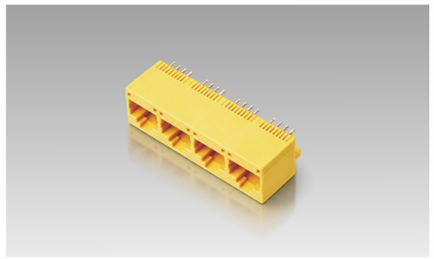
Material
1.Housing:Nylon,PBT(UL94-V0)Color:Black, Gray or other colors available.
2.Contacts:
Round Pin:0.46mm diameter phosphor bronze hard temper with hard gold plating thickness options(Fu"/ 3u"/6u"/15u"/30u"/50u")over 50u" min nickel.
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated over nickel.
3.Shielding:0.20mm thickness brass with nickel plated.

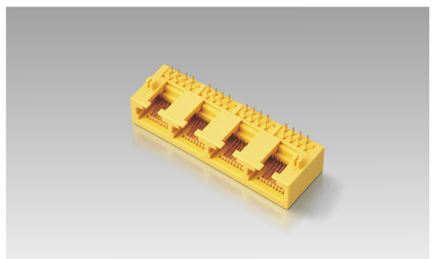
Specification Characteristic
1.Port: 2X1,2X2,2X4,2X6,2X8
2.Position Number:8 Positions available
3.Contact Number: 8 Contacts
4.Shielding:Shielded with EMI Finger/Shielded without EMI Finger
5.LED:Without LED/ With LED option (Differnet colors of LED option available)

Electrical
1.Current Rating:1.5Amps per contact
2.Voltage Rating: 125Volts AC
3.Contact Resistance:30 miliohms Max
4.Insulation resistance:500Megohms Min @ 500VDC.
5.Dielectric Withstanding Voltage:Contact to contact 1000VAC @ 60HZ

Feature
Shielded RJ45 Modular Jack (withou magnetics).
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Operating temperature:-40℃ to +85℃
Storage temperature:-40℃ to +85℃







RJ45 1XN Series

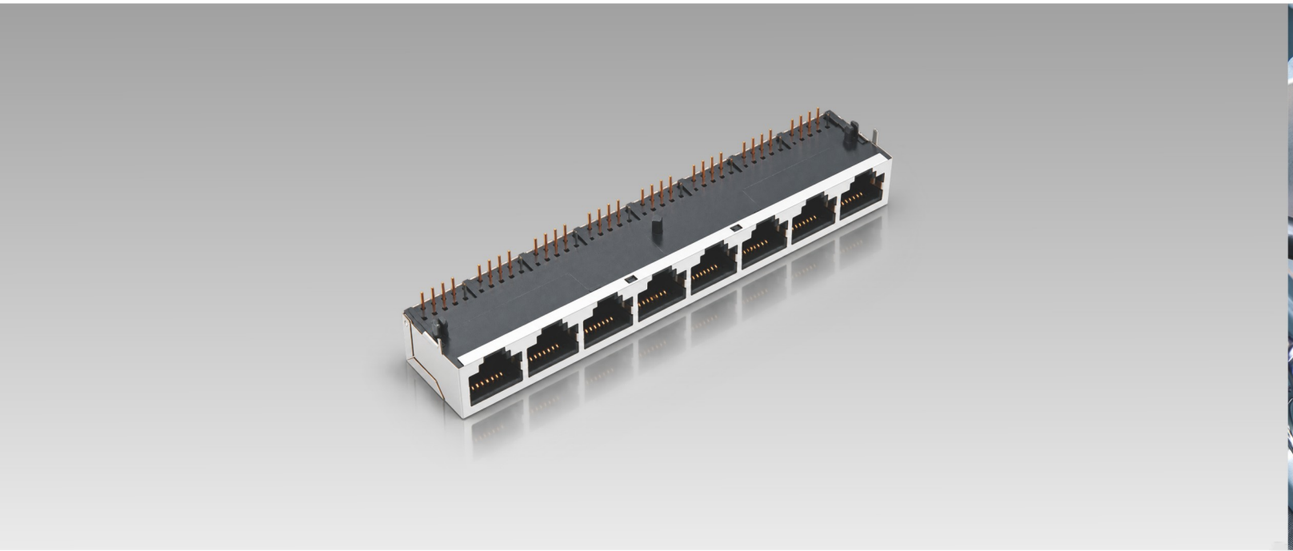
Rj45 Module Jack Without Magnetics

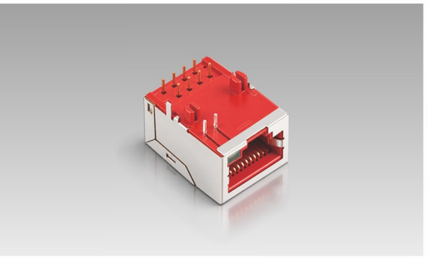
Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black,Gray or other colors available.
2.Contacts:
Round Pin:0.46mm diameter phosphor bronze hard temper with hard gold plating thickness options(Fu"/ 3u"/6u"/15u"/30u"/50u")over 50u" min nickel.
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated over nickel.
3.Shielding:0.20mm thickness brass with nickel plated.

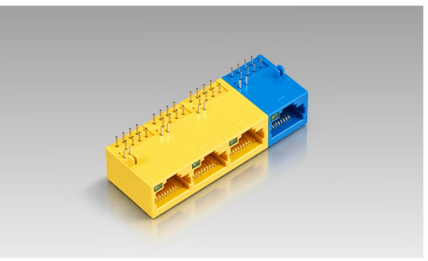
Specification Characteristic
1.Port: 1X1,1X2,1X4,1X8
2.Position Number:8 Positions available
3.Contact Number: 8 Contacts
4.Shielding:Withour Shield/Shielded with EMI Finger/ Shielded without EMI Finger
5.LED:Without LED/ With LED option (Differnet colors of LED option available)

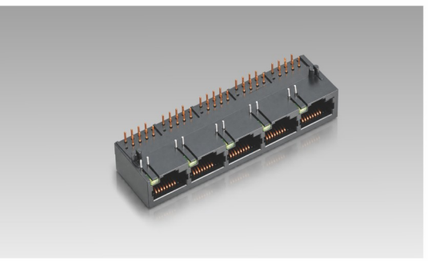
Electrical
1.Current Rating:1.5Amps per contact
2.Voltage Rating: 125Volts AC
3.Contact Resistance:30 miliohms Max
3.Insulation resistance:500Megohms Min @ 500VDC.
4.Dielectric Withstanding Voltage:Contact to contact 1000VAC @ 60HZ

Feature
Shielded RJ45 Modular Jack (withou magnetics).
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Operating temperature:-40℃ to +85℃
Storage temperature:-40℃ to +85℃









RJ45 1XN Series

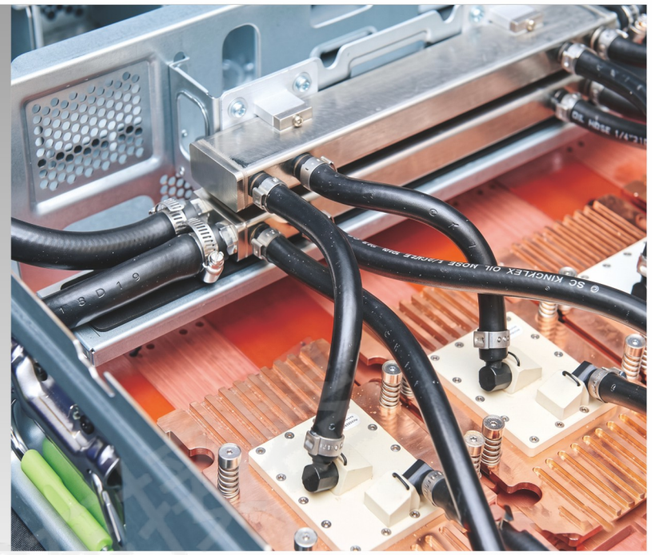
RJ45 Module Jack Without Magnetics

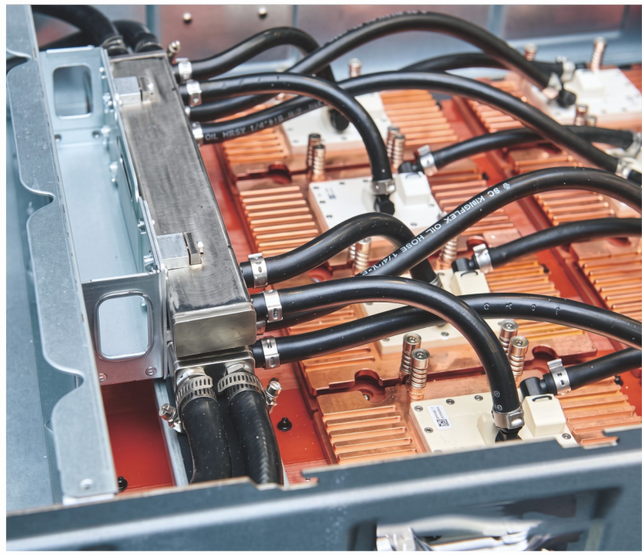
Material
1.Housing:Nylon,PBT(UL94-V0)
Color:Black,Gray or other colors available.
2.Contacts:
Round Pin:0.46mm diameter phosphor bronze hard temper with hard gold plating thickness options(Fu"/ 3u"/6u"/15u"/30u"/50u")over 50u" min nickel.
Flat Pin:0.35mm thickness phosphor bronze plated with 3u"/6u"/15u"/30u"/50u" Min hard gold plated over nickel.
3.Shielding:0.20mm thickness brass with nickel plated.

Specification Characteristic
1.Port: 1X1,1X2,1X5,1X6,1X8
2.Position Number:8 Positions/10 Positions available
3.Contact Number: 8 Contacts /10 Contacts
4.Shielding:without Shield/Shielded with EMI Finger/Shielded without EMI Finger
5.LED:Without LED/ With LED option (Differnet colors of LED option available)

Electrical
1.Current Rating:1.5Amps per contact
2.Voltage Rating: 125Volts AC
3.Contact Resistance:30 miliohms Max
4.Insulation resistance:500Megohms Min @ 500VDC.
5.Dielectric Withstanding Voltage:Contact to contact 1000VAC @ 60HZ

Feature:
Shielded RJ45 Modular Jack (withou magnetics).
Jack cavity conforms to FCC rules and regulation Part 68 subpart F.
Operating temperature:-40℃ to +85℃
Storage temperature:-40℃ to +85℃



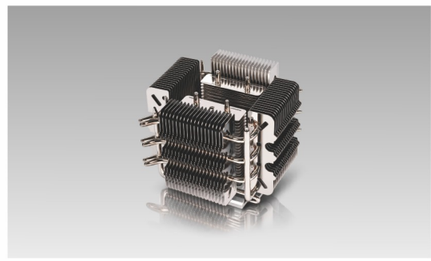


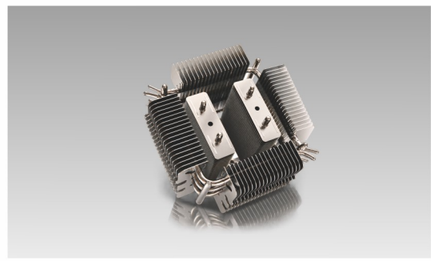
Material:
1. Sink: Copper heat pipe with aluminum fin
2. Pedestal: Copper
3. Plating: Ni plating
4. Contact Surface medium: Thermal paste or grease

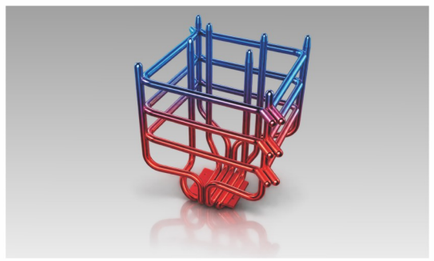
Electrical:
1. Voltage Rating: 12 V
2. Current Rating: 0.25–2.5 A options
3. Fan Speed: 800–1,500 RPM
4. Rated Power: 3–30 W options

Feature
1. Anti-gravity pure-copper heat pipes rapidly transfer heat away from the chip.
2. PWM intelligent speed control with a high-performance fan.
3. Innovative design and excellent quality.
4. Multi-platform support.
5. Operating Temperature: 0 °C to 85 °C
6. Storage Temperature: –40 °C to 105 °C

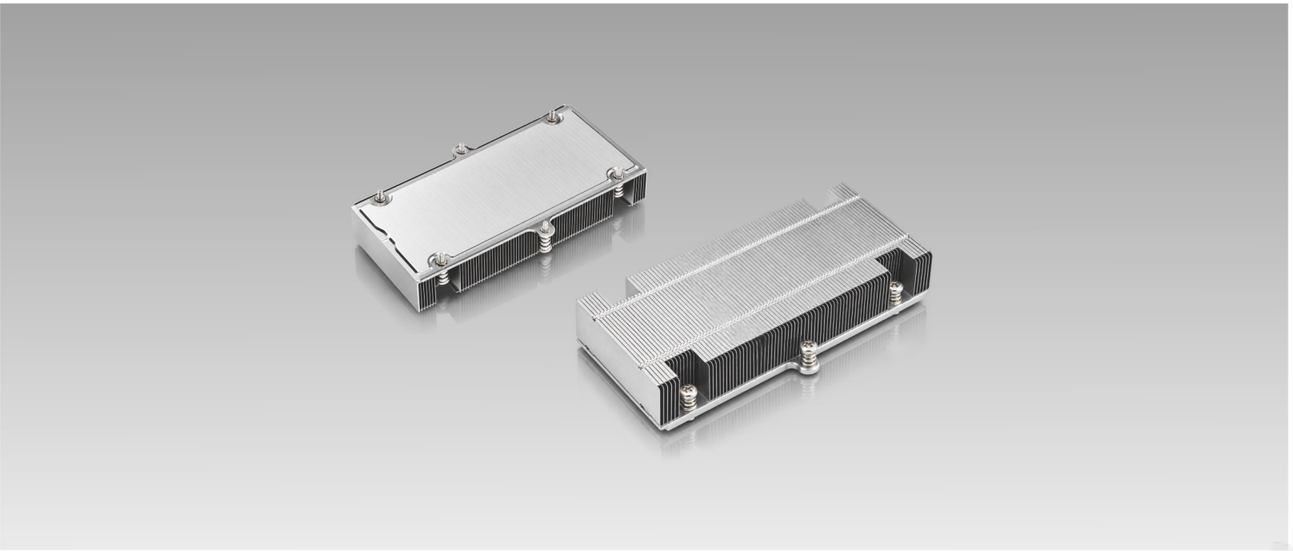








Vapor Chamber and Heat Sink



Vapor Chamber and Heat Sink

Material

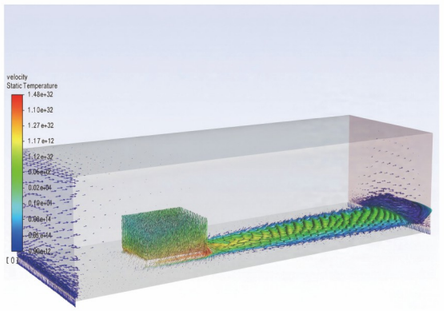
Colors: silver, copper, and other colors are available.
Pedestal: Copper
Sink: Aluminum and Copper
Plating: Ni 50" min.
Contact Surface Medium: Thermal Paste or Grease

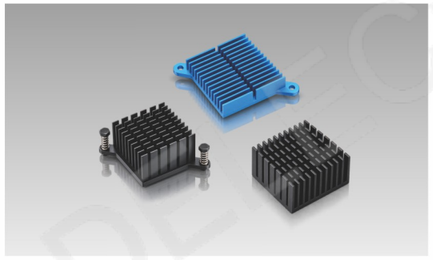
Feature

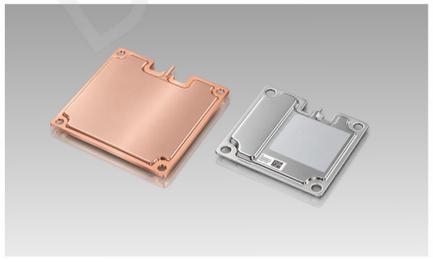
Operating Temperature: 0 °C to 80 °C
Storage Temperature: –40 °C to 130 °C
Pressure Resistance: 3.0 kg/cm²
Thermal Shock: –40 °C to 100 °C, 500 cycles
Service Life: 10 years

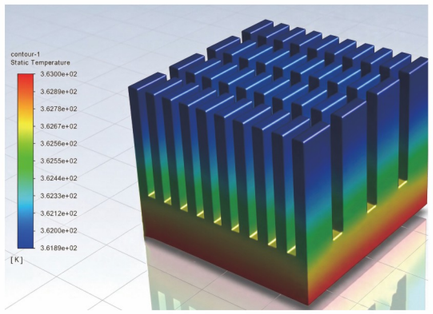
Specifications

Qmax: 350 W
Minimum Thermal Resistance: 0.152 K/W
Heat Sink Height: 1U
Sink Thickness: 0.45 mm
Pedestal Thickness: 3.1 mm
Pedestal Area: 144 cm²
Flatness: <50 μm









Memo

Memo

DELEC 连接器