

1	2	3	4	5	6	7	8	
H								
G								
F								
E								
D								
C								
B								
A								

SPECIFICATION FOR APPROVAL



MARKETING GROUP	R&D GROUP	QA GROUP
ISSUED BY	CHECKED BY	QA INSPECTION
CHEN	Weide Li	Liu Ting

CUSTOMER

CUSTOMER APPROVAL:

☐ APPROVAL ☐ CONCESSIONARY ☐ REJECTED

ISSUED BY : _____

CHECKED BY: _____

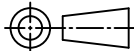
APPROVED BY: _____

COMMENTS : _____

CUSTOMER: _____

CUSTOMER PART NO: _____

SAMPLE Q'TY: _____

TITLE						 多亞電子有限公司 Duoya Electronics Co.,Ltd		
PART NO.				GENERAL TOLERANCE			UNIT:MM(INCH)	SIZE: A4
DRAW	CHEN	DATE	2026-08-19	.X±0.35	.X±1"	SCALE: 1:1	SHEET: 1/7	REV:B
CHECK	WEIDE LI	DATE	2026-08-19	.XX±0.25	.XX±0.5"			
APPROVE	De	DATE	2026-08-19	.XXX				

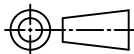
THIS DRAWING IS A CONTROLLED DOCUMENT FOR DUOYA CONNECTOR CORPORATION

EMAIL: MAILBOX@DELEC.COM.CN WEB SITE: HTTP://WWW.DELEC.COM.CN

PRODUCT DRAWING

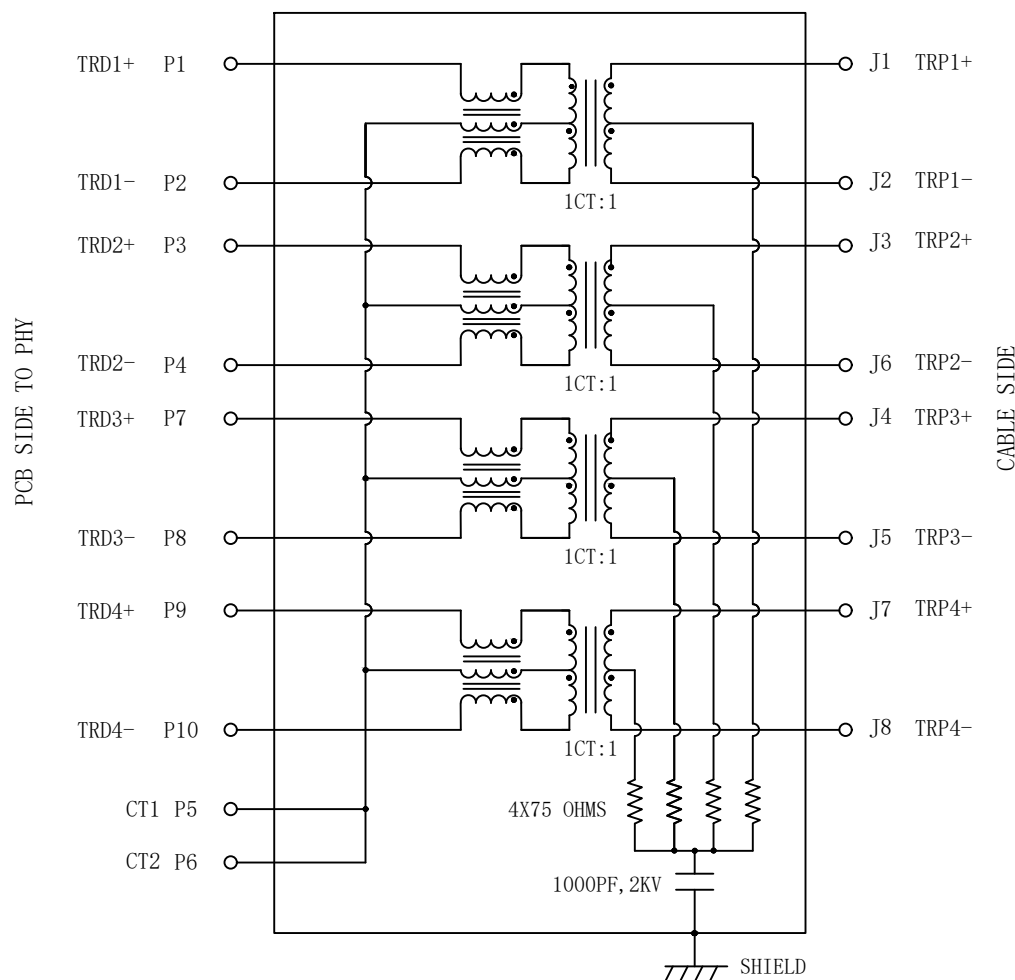
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BY DUOYA CONNECTOR CORPORATION

	1	2	3	4	5	6	7	8	
H	ISSUE RECORD								
	REV	DESCRIPTION OF CHANGE			REVIEWED BY	APPROVED BY	ISSUE DATE		
	A	FIRST ISSUE			Li	De	2026-07-13		
G	B	新增LED, 产品LOGO			CHEN	De	2026-08-19		
F									
E									
D									
C									
B									
A	TITLE 1X2 PORT TAB DOWN RJ45 CONNECTOR (PORT1 10G BASE-T/PORT2 2.5G BASE-T)						 多亞電子有限公司 Duoya Electronics Co.,Ltd		
	PART NO. DY59-A21ALTA-24G				GENERAL TOLERANCE			UNIT:MM(INCH)	SIZE: A4
	DRAW	CHEN	DATE	2026-08-19	.X±0.35	.X±1"	SCALE: 1:1	SHEET: 2/7	REV:B
	CHECK	WEIDE LI	DATE	2026-08-19	.XX±0.25	.XX±0.5"			
	APPROVE	De	DATE	2026-08-19	.XXX				
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PRODUCT DRAWING BY DUOYA CONNECTOR CORPORATION © COPYRIGHT 2010									

SCHEMATIC:

PORT1 (10G BASE-T)



ELECTRICAL CHARACTERISTICS @ 25°C

TURN RATIO:

(P1-P2):(J1-J2)=1:1 ±2%.
 (P3-P4):(J3-J6)=1:1 ±2%.
 (P7-P8):(J4-J5)=1:1 ±2%.
 (P9-P10):(J7-J8)=1:1 ±2%.

PRIMARY INDUCTANCE:

120uH MIN.@100KHz,100mVRMS

HI-POT TEST:

PCB SIDE TO CABLE SIDE 2250VDC.

Insertion Loss:

1MHz~200MHz -1.5dB MAX.
 200MHz~400MHz -2.0dB MAX.
 400MHz~500MHz -3.0dB MAX.

Return Loss: (Load:100 ohms)

1MHz~100 MHz -20 dB MIN
 100MHz~500 MHz -20 + 20*log10(f/100) dB MIN.

Cross Talk:

1 MHz~100 MHz -25dB MIN.
 100 MHz~500 MHz -19dB MIN.

CM to CM Rejection:

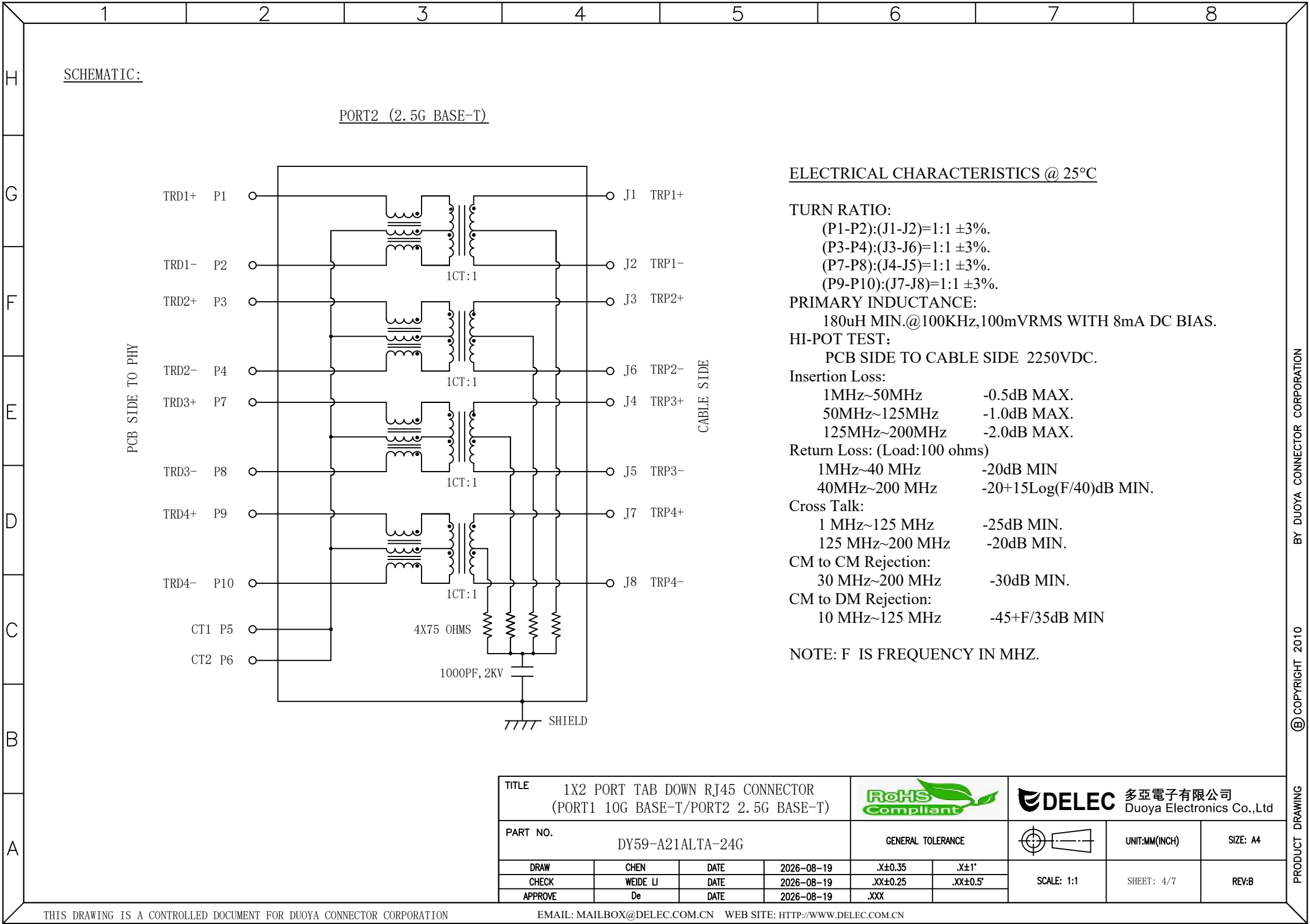
1 MHz~250 MHz -20dB MIN.
 250 MHz~500 MHz -18dB MIN.

CM to DM Rejection:

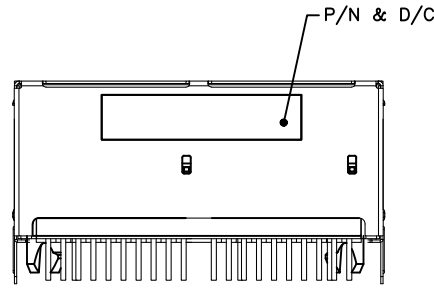
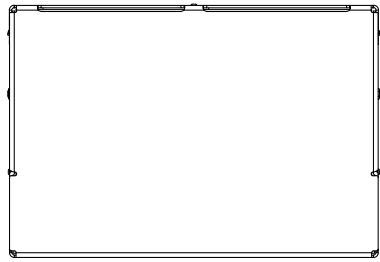
1 MHz~250 MHz -30dB MIN
 250 MHz~500 MHz -20dB MIN

NOTE: F IS FREQUENCY IN MHZ.

TITLE 1X2 PORT TAB DOWN RJ45 CONNECTOR (PORT1 10G BASE-T/PORT2 2.5G BASE-T)				RoHS Compliant		DELEC 多亞電子有限公司 Duoya Electronics Co.,Ltd		
PART NO. DY59-A21ALTA-24G				GENERAL TOLERANCE		 SCALE: 1:1	UNIT:MM(INCH)	SIZE: A4
DRAW	CHEN	DATE	2026-08-19	.X±0.35	.X±1"			
CHECK	WEIDE LI	DATE	2026-08-19	.XX±0.25	.XX±0.5"			
APPROVE	De	DATE	2026-08-19	.XXX			SHEET: 3/7	REV:B



MECHANICAL DIMENSION



Back View

1.MATERIALS AND FINISH

HOUSING:THERMOPLASTIC PA46 FLAMMABILITY RATING UL94V-0.

(COLOR:PANTONE BLACK)

CONTACT:PHOSPHOR BRONZE T=0.35MM FLAT PIN

PLATING:6u"GOLD PLATING OVER NICKEL

SHIELD: 0.20MM THICKNESS COPPER ALLOY WITH NICKEL PLATED

PCB RETENTION FRE-SOLDER: 1LB MIN.

TAILS: NICKEL PLATING COVERED BY 100U" TIN PLATING.

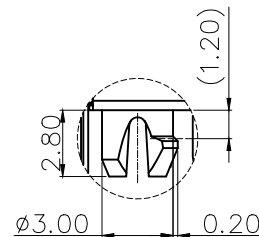
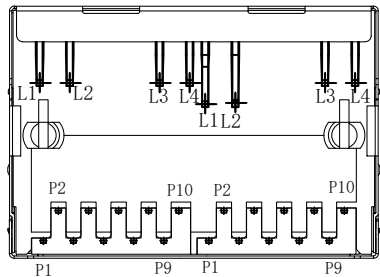
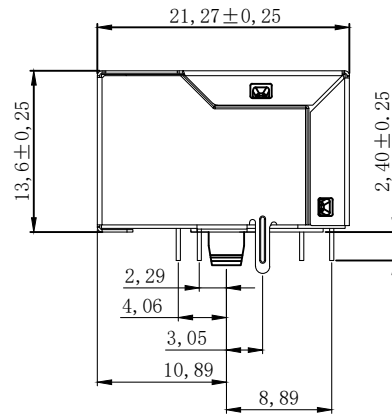
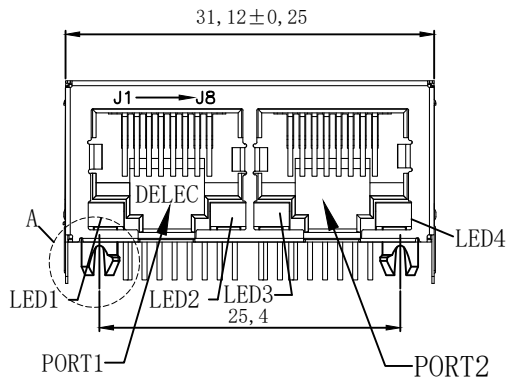
2.MECHANICAL CHARACTERISTICS

DURABILITY: 750(MODULAR JACK) INSERTION/PLUG DIMENSION CYCLES

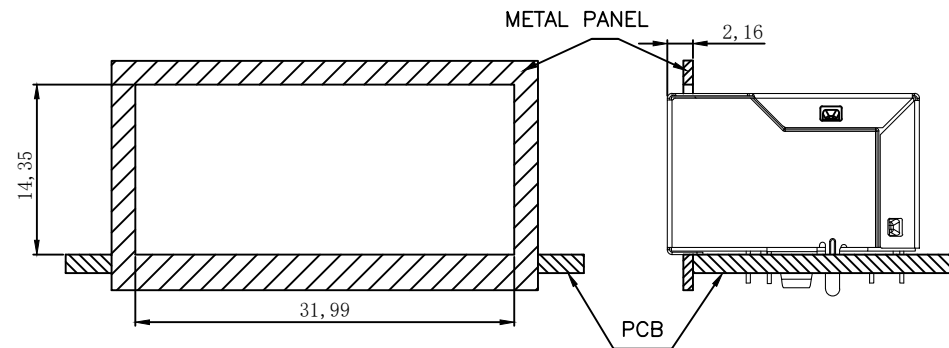
3.ENVIRONMENTAL

OPERATING TEMPERATURE: -40℃~+85℃

STORAGE TEMPERATURE: -40℃~+85℃

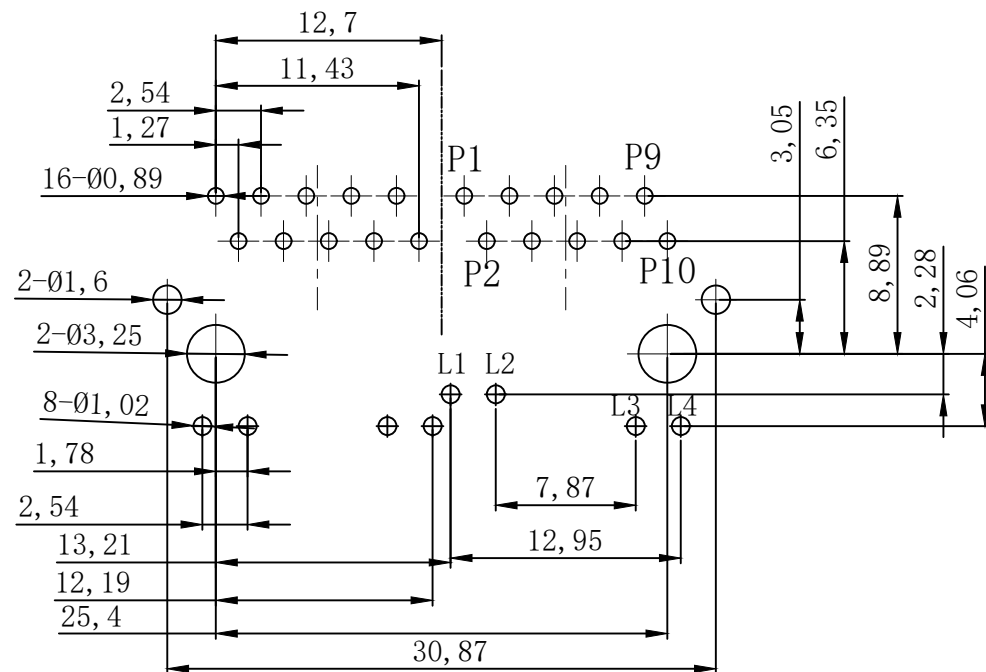


DETAIL A
SCALE 2:1

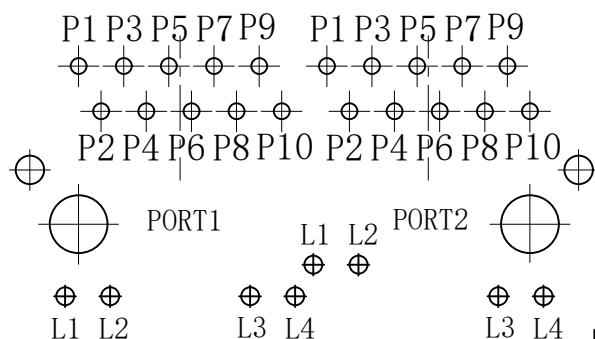


TITLE 1X2 PORT TAB DOWN RJ45 CONNECTOR (PORT1 10G BASE-T/PORT2 2.5G BASE-T)				RoHS Compliant		DELEC 多亞電子有限公司 Duoya Electronics Co.,Ltd	
PART NO. DY59-A21ALTA-24G				GENERAL TOLERANCE		UNIT:MM(INCH)	SIZE: A4
DRAW	CHEN	DATE	2026-08-19	.X±0.35	.X±1"	SCALE: 1:1	SHEET: 5/7
CHECK	WEIDE LI	DATE	2026-08-19	.XX±0.25	.XX±0.5"		
APPROVE	De	DATE	2026-08-19	.XXX			

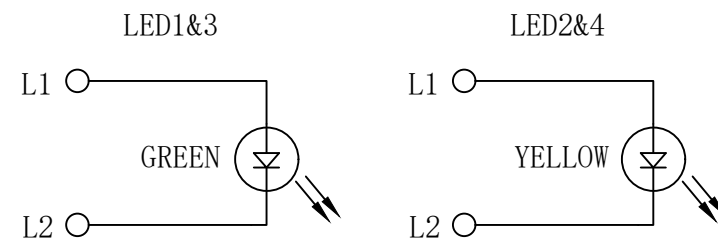
RECOMMENDED PCB LAYOUT AND LED:



RECOMMENDED PCB LAYOUT
(COMPONENT SIDE VIEW)
TOLERANCE: ± 0.08



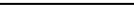
PIN NUMBER ASSIGN
(COMPONENT SIDE VIEW)



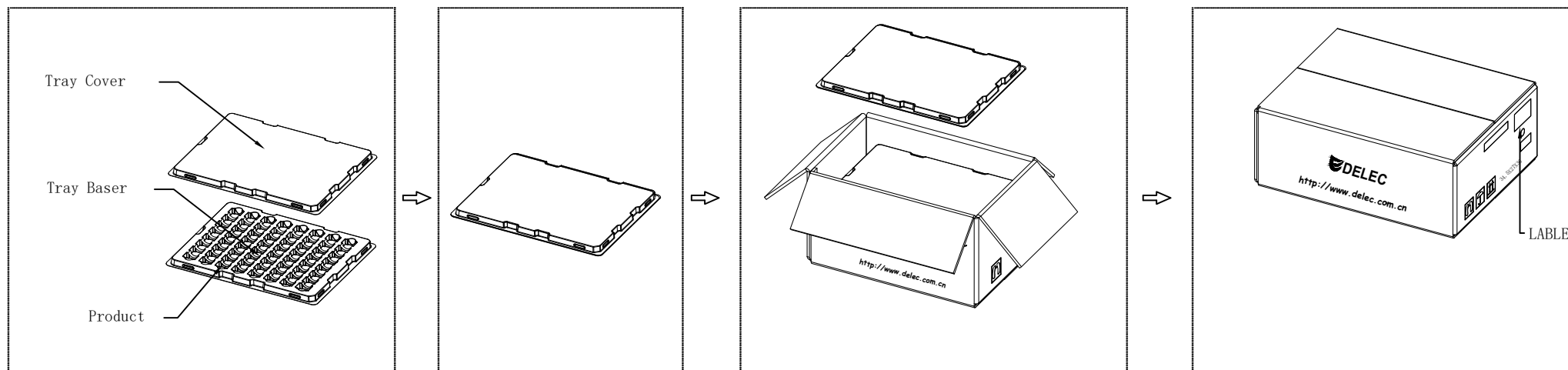
LED 1&3 POLARITY			LED 2&4 POLARITY		
L1	L2	COLOR	L1	L2	COLOR
+	-	GREEN	+	-	Yellow

LED ELECTRICAL / OPTICAL CHARACTERISTICS:

COLOR	IF	VF (FORWARD VOLTAGE)	λ D DOMINANT WAVELENGTH
GREEN	20mA	1.8V-2.4 V	565nm
YELLOW	20mA	1.8V-2.4 V	590nm

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DRAW	CHEN	DATE	2026-08-19	.X±0.35	.X±1"	SCALE: 1:1	SHEET: 6/7	REV:B	
CHECK	WEIDE LI	DATE	2026-08-19	.XX±0.25	.XX±0.5"				
APPROVE	De	DATE	2026-08-19	.XXX					

PACKAGE INFORMATION AND LABEL



PACKING QUANTITY : 40 PCS FINISHED GOODS PER TRAY
14 TRAYS (560 PCS FINISHED GOODS) PER CARTON BOX

TITLE 1X2 PORT TAB DOWN RJ45 CONNECTOR (PORT1 10G BASE-T/PORT2 2.5G BASE-T)				RoHS Compliant		DELEC 多亞電子有限公司 Duoya Electronics Co.,Ltd		
PART NO. DY59-A21ALTA-24G				GENERAL TOLERANCE		 SCALE: 1:1	UNIT:MM(INCH)	SIZE: A4
DRAW	CHEN	DATE	2026-08-19	.X±0.35	.X±1"		SHEET: 7/7	REV:B
CHECK	WEIDE LI	DATE	2026-08-19	.XX±0.25	.XX±0.5"			
APPROVE	De	DATE	2026-08-19	.XXX				