

RJ45 10/100/1000 Base-TX 1x2 Jack with Magnetic Module



ARJ12A Series

Request Samples



Check Inventory



31.28 x 13.60 x 21.50 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Features

- IEEE 802.3ab compliant
- Integrated LAN magnetics
- Suitable for RoHS compliant reflow
- Suitable CAT 5 & 6 cable and UTP

Applications

- 10, 100 and 1000 Base-T LAN
- NIC, LoM and PC
- High-density data center switches
- NAS/ Expander storage

Electrical Specifications

Part Number	Turns Ratio $\pm 5\%$		Tab	EMI Fingers	LEDs	Insertion Loss (dB typ)	Return Loss (dB typ @100 Ω $\pm 15\%$)		
	TX	RX					1- 10 MHz	30 MHz	60-80 MHz
ARJ12A-MASD-A-B-EMU2	1CT:1CT	1CT:1CT	DOWN	Yes	G/Y	-1.2	-18	-16	-12
ARJ12A-MASD-A-B-FMU2	1CT:1CT	1CT:1CT	DOWN	Yes	G/Y	-1.2	-18	-16	-12
ARJ12A-MCSD-MU2	1CT:1CT	1CT:1CT	DOWN	Yes	-	-1.2	-18	-16	-12

Part Number	Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (Vrms)
	1 - 10 MHz	30 - 60 MHz	60 - 100 MHz	1 - 50 MHz	50 - 130 MHz	
ARJ12A-MASD-A-B-EMU2	-40	-35	-30	-30	-20	1500
ARJ12A-MASD-A-B-FMU2	-40	-35	-30	-30	-20	1500
ARJ12A-MCSD-MU2	-40	-35	-30	-30	-20	1500

Operating Temp: 0°C to +70°C

Storage Temp: -40°C to +85°C

Operating life: 750 Cycles min.

Part Identification

ARJ12A - - - -

Mechanical	Schematic	Left LED color (e.g. B for Yellow, AB for Green-Yellow)	Right LED color (e.g. B for Yellow, AB for Green-Yellow)	LED polarity	Turns Ratio (Tx)	Turns Ratio (Rx)	Gold plating
MA ~ MD (Please see mechanical section)	SA ~ SZ (Please see schematic section)	Blank: No LED A: Green B: Yellow C: Amber D: Orange	Blank: No LED A: Green B: Yellow C: Amber D: Orange	Blank: No LED E ~ H (Please see 7.0 LED polarity section)	K: 1CT:1.41 L: 1CT:1 M: 1CT:1CT N: 1.414:1CT O: 1CT:1.41CT P: 1:2CT Q: 1:1.414CT R: 1CT:2.5	S: 1CT:1.41 T: 1CT:1 U: 1CT:1CT V: 1.414:1CT W: 1CT:1.41CT X: 1:2CT Y: 1:1.414CT Z: 1CT:2.5	1: 3u “ 2: 6u “ 3: 15u “ 4: 30u “ 5: 50u “

Note: Only part numbers listed on the electrical specs table are available. Contact Abracon for custom configurations.



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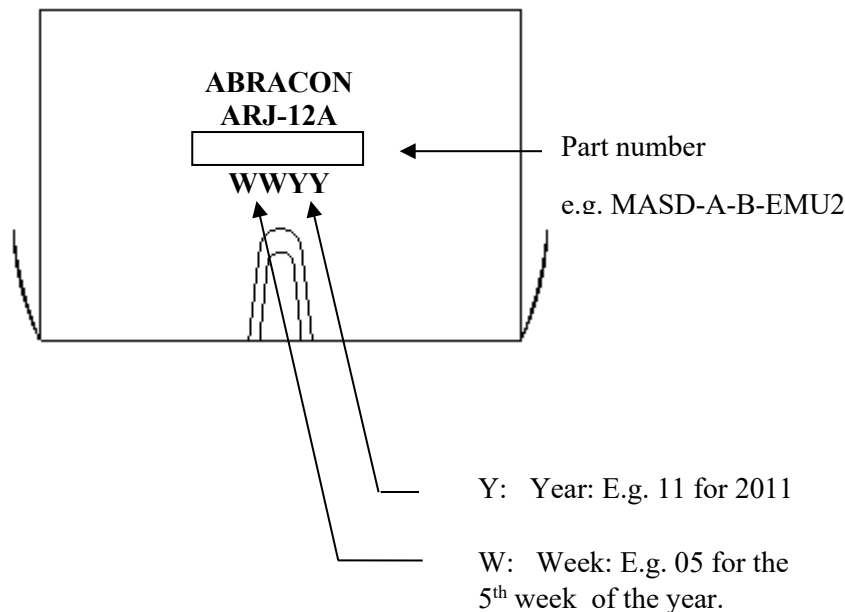


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Marking



Materials

Housing Material:

MATERIAL: NYLON GF (Fr50) UL94V-0
STANDARD COLOR: BLACK

Insert Material:

MATERIAL: Phos-Bronze C5210 EH---0.35mm Thickness
Insert -PBT GF UL94V-0
1.PLATING (1) NICKEL
2.PLATING (2) 100%Sn
3.PLATING (3) GOLD (3u " ~50u ") (see options)

Plate Material:

PBT GF UL 94V-0

Contact pin Material:

MATERIAL: Phos-Bronze C5191---0.35mm Thickness
1.PLATING (1) NICKEL
2.PLATING (2) 100%Sn

Shielding Material:

BRASS C2680 PLATING NICKEL



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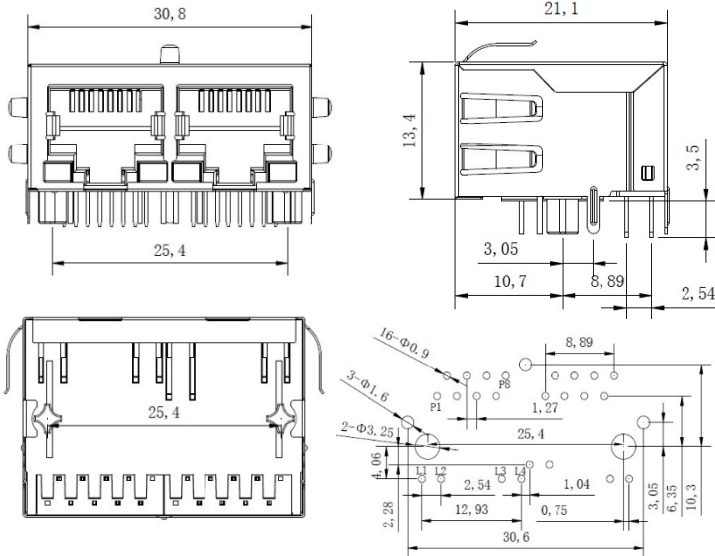
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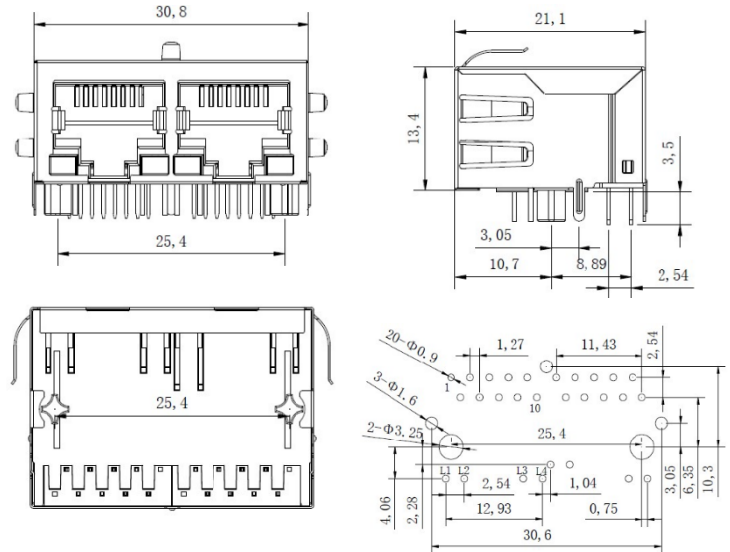
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Mechanical Specifications

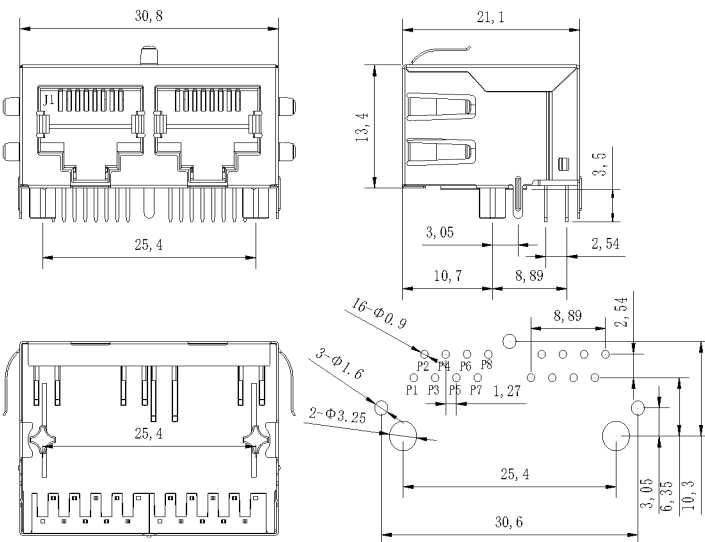
MA (10/100 Base-T)



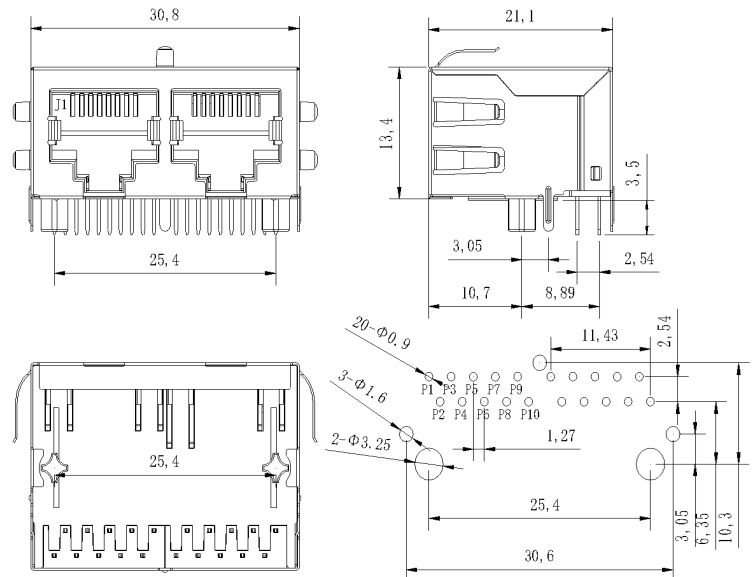
MB (1000 Base-T)



MC (10/100 Base-T)



MD (1000 Base-T)



Dimensions: mm

All tolerances are ± 0.25 unless otherwise specified.



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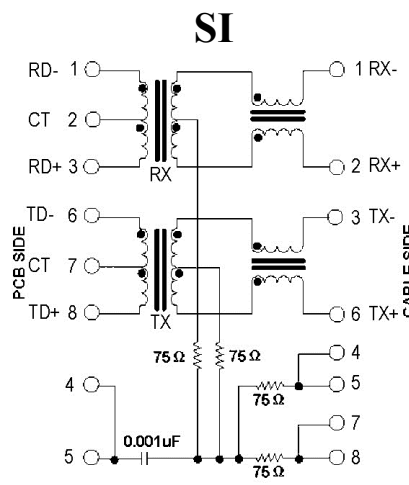
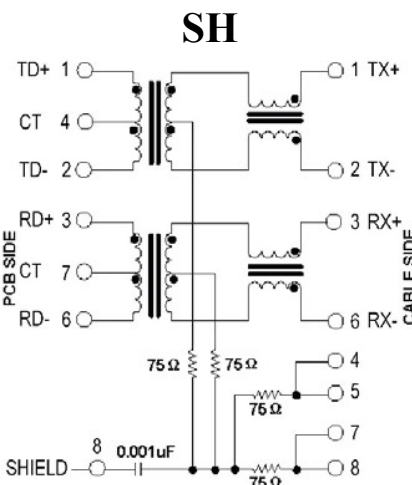
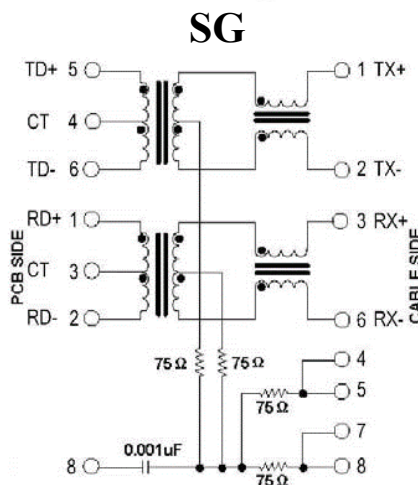
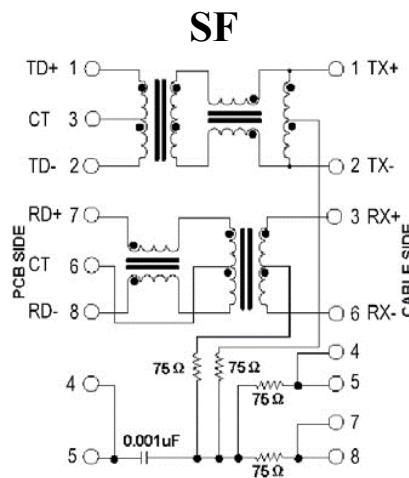
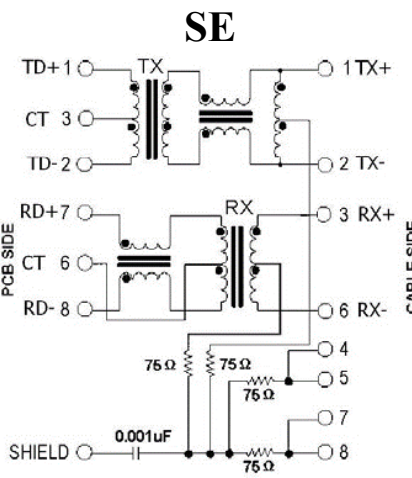
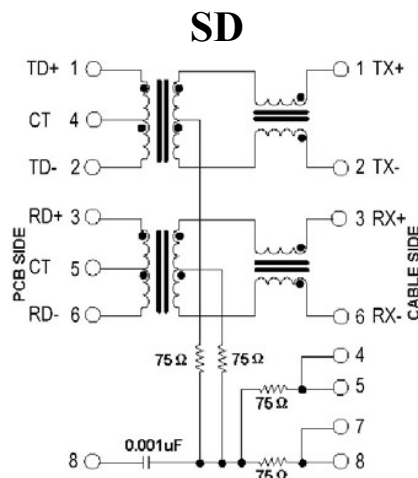
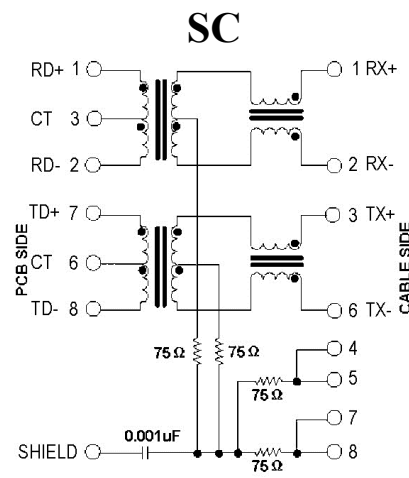
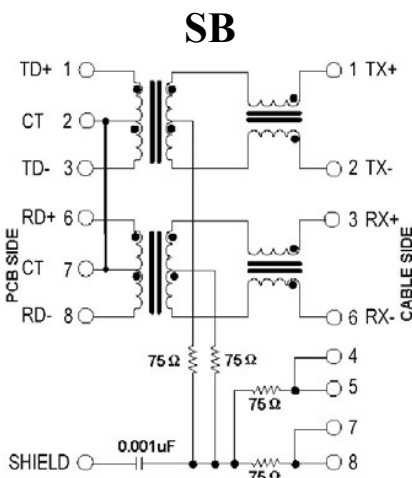
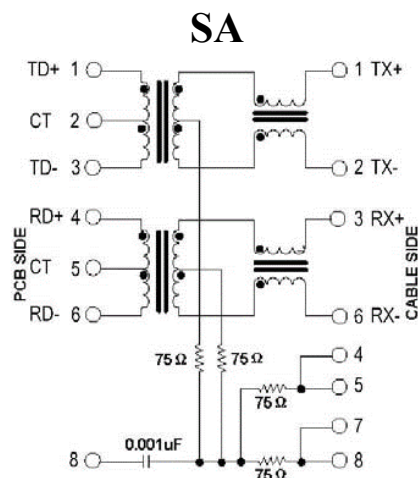


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Schematics



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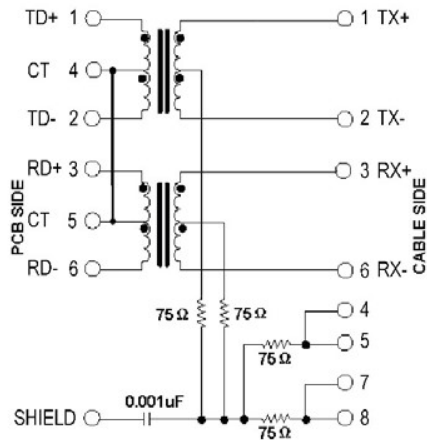


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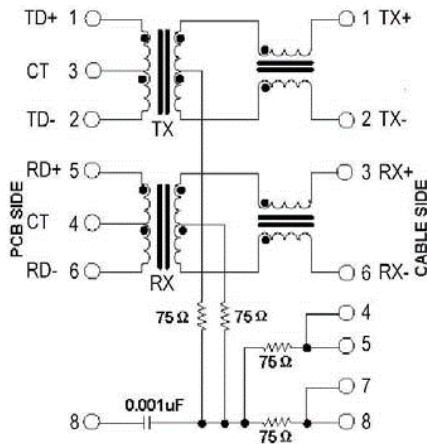


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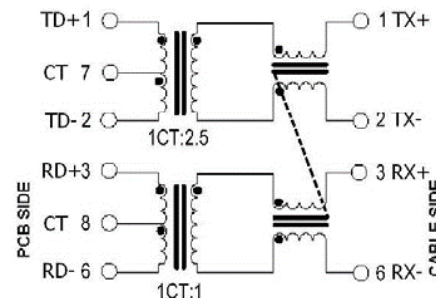
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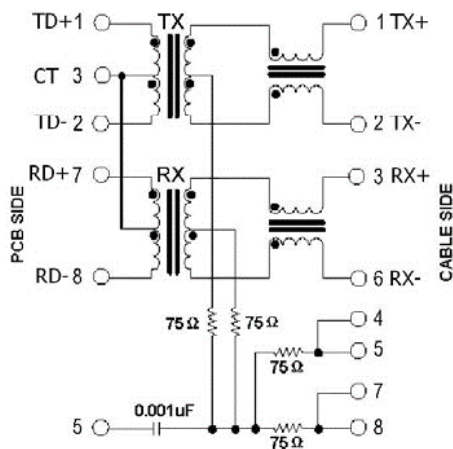
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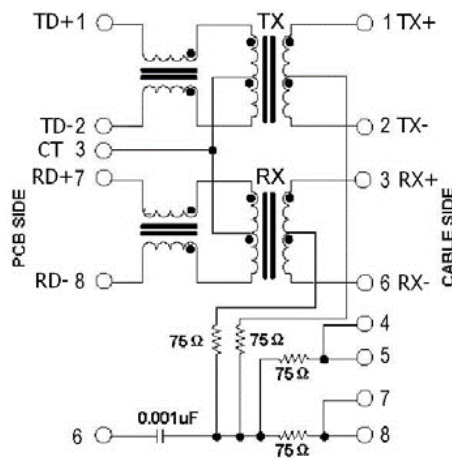
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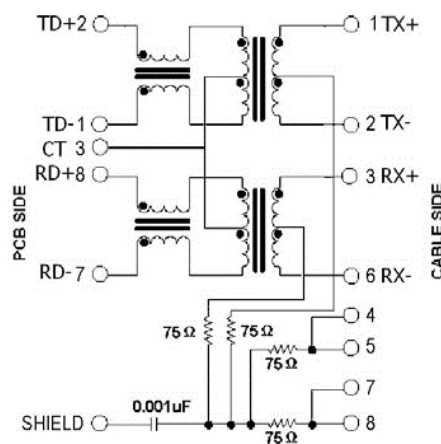
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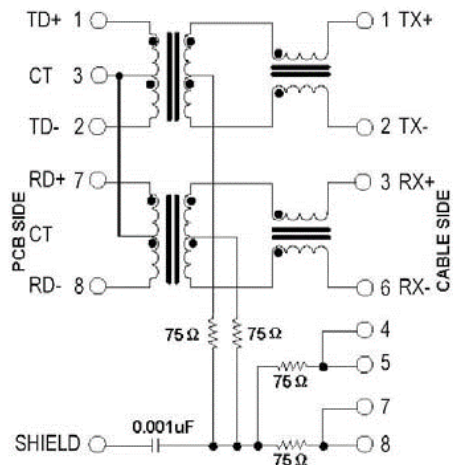
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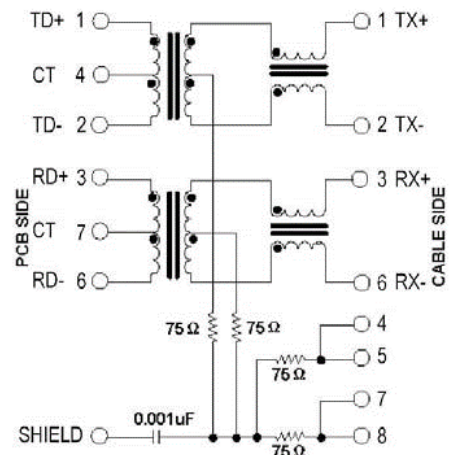
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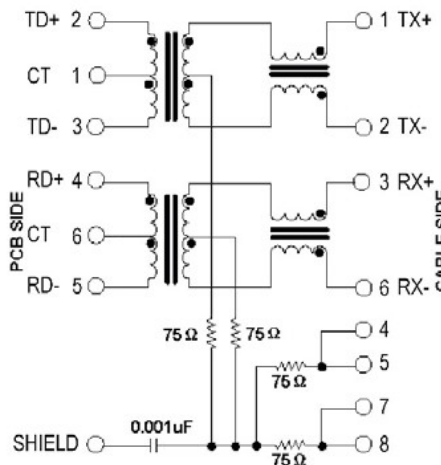
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SQ



SR



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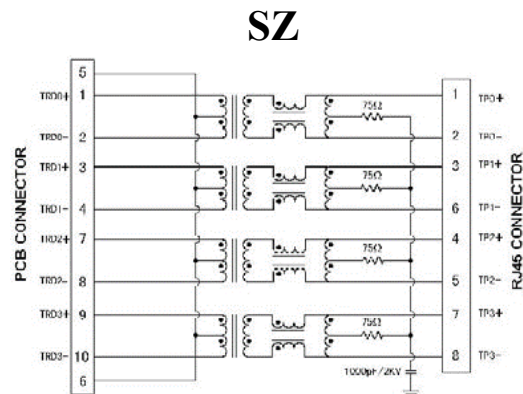
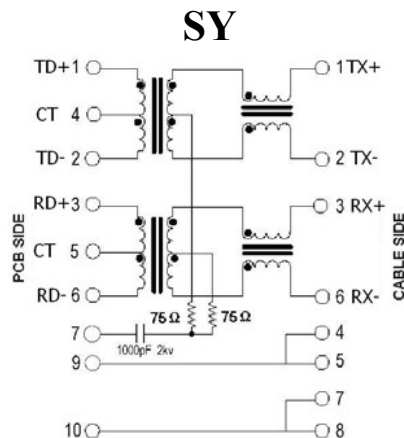
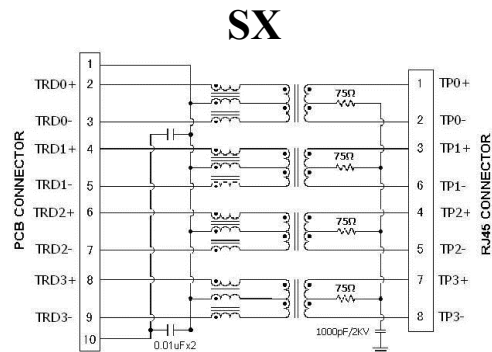
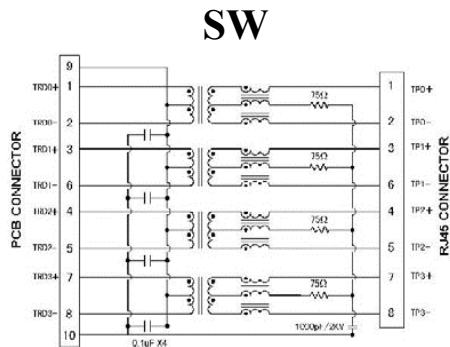
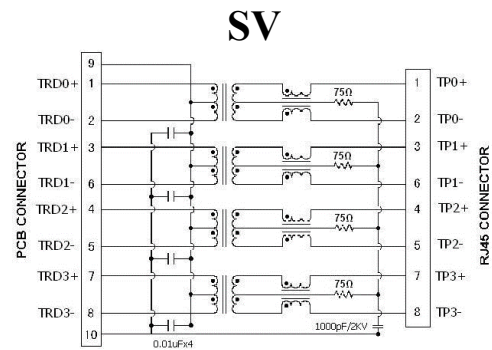
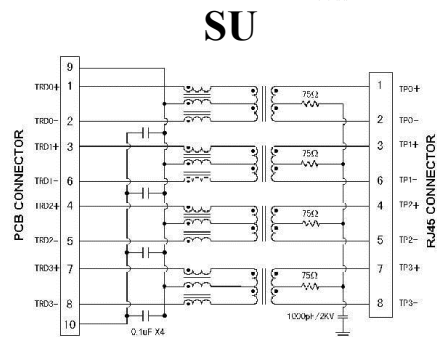
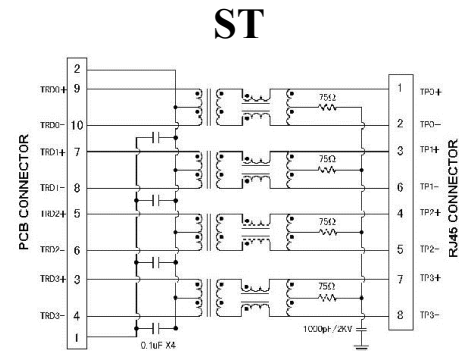
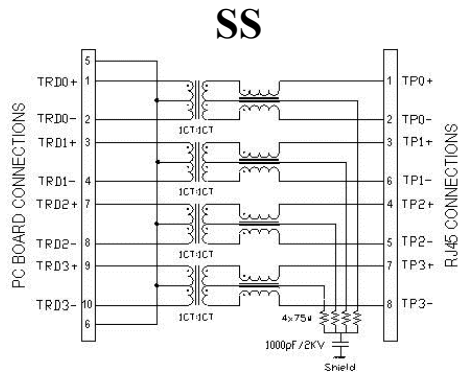
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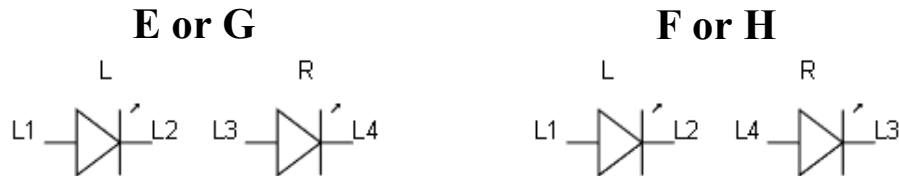


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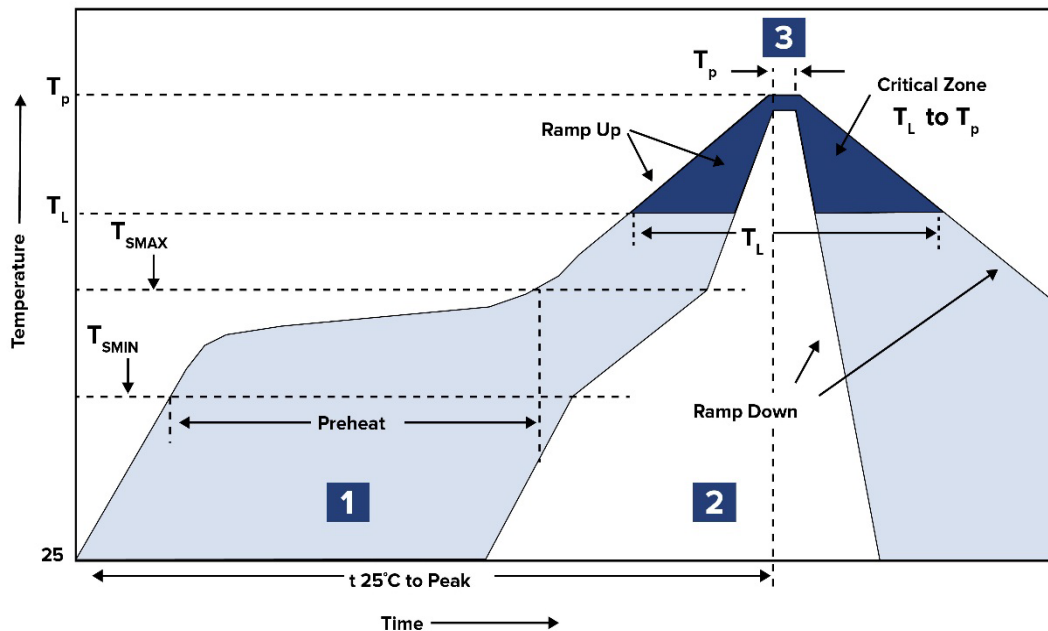


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LEDs Polarity

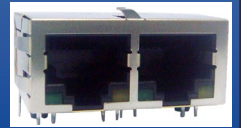


Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 120°C ~ 180°C	60 ~ 120 sec.
2	Reflow	T_L 180°C	120 sec. Max
3	Peak heat	T_P 250°C±10°C	5 sec. Max

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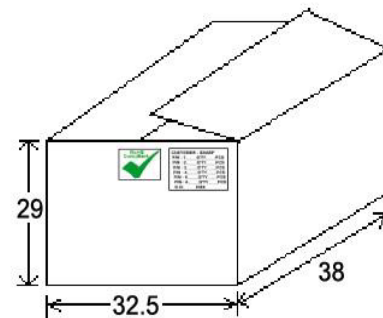
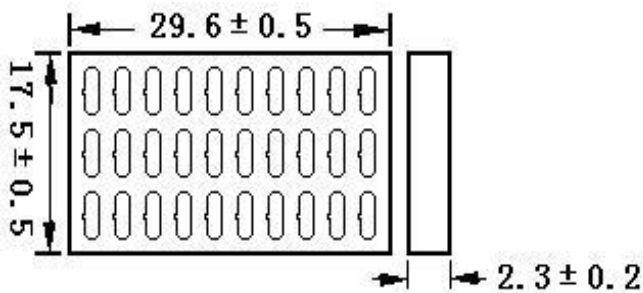
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Packaging

Tray: 30 pcs/tray

Outer carton unit: 600pcs/20 trays/box

Packaging material: PET



Dimensions: mm

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