

RJ45 10/100/1000 Base-TX Tab down 1x4 Jack with Magnetic Module

ARJ14A

RoHS
Compliant



59.12 x 13.60 x 21.50 mm /
58.40 x 11.50 x 17.60 mm

FEATURES:

- Tab down
- Available with or without LED
- Suitable CAT 5 & 6 cable and UTP
- Comply IEEE 802.3ab
- LAN Magnetic with RJ45
- Suitable for RoHS compliant reflow

APPLICATIONS:

- 10, 100 and 1000 Base-T LAN
- NIC, LoM and PC

STANDARD SPECIFICATIONS at 25°C

Operating temperature range: 0°C to +70°C Storage temperature range: -40°C to +85°C

Part Number	Ratio ± 5%		Tab Option	EMI Fingers (see Mechanical)	LEDs L/R	Insertion Loss (dB typ) 0.3- 100 MHz	Return Loss (dB typ @100Ω±15%)		
	TX	RX					1- 10 MHz	30 MHz	60-80 MHz
ARJ14A-M□SA-MU2	1CT:1CT	1CT:1CT	DOWN	Yes/No	-	-1.2	-18	-16	-12
ARJ14A-M□SB-MU2	1CT:1CT	1CT:1CT	DOWN	Yes/No	-	-1.2	-18	-16	-12
ARJ14A-M□SC-MU2	1CT:1CT	1CT:1CT	DOWN	Yes/No	-	-1.2	-18	-16	-12
ARJ14A-M□SD-A-B-ΔMU2	1CT:1CT	1CT:1CT	DOWN	Yes	G/Y	-1.2	-18	-16	-12
ARJ14A-M□SD-MU2	1CT:1CT	1CT:1CT	DOWN	Yes/No	-	-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	
ARJ14A-M□SA-MU2	-40	-35	-30	-30	-20	1500
ARJ14A-M□SB-MU2	-30	-30	-30	-30	-20	1500
ARJ14A-M□SC-MU2	-40	-35	-30	-30	-20	1500
ARJ14A-M□SD-A-B-ΔMU2	-40	-35	-30	-30	-20	1500
ARJ14A-M□SD-MU2	-40	-35	-30	-30	-20	1500

□: Mechanical option: E, F or I for non- LED; A or B for LED.

Δ: LED polarity option E or F

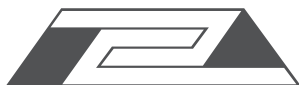
Contact Abracon for more custom configurations. See options to build a custom configuration.

OPTIONS AND PART IDENTIFICATION

ARJ14A - □ - □ - □ - □ - □ - □ - □

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 ~ MI (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 “

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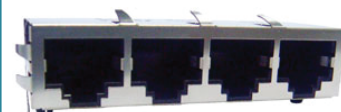
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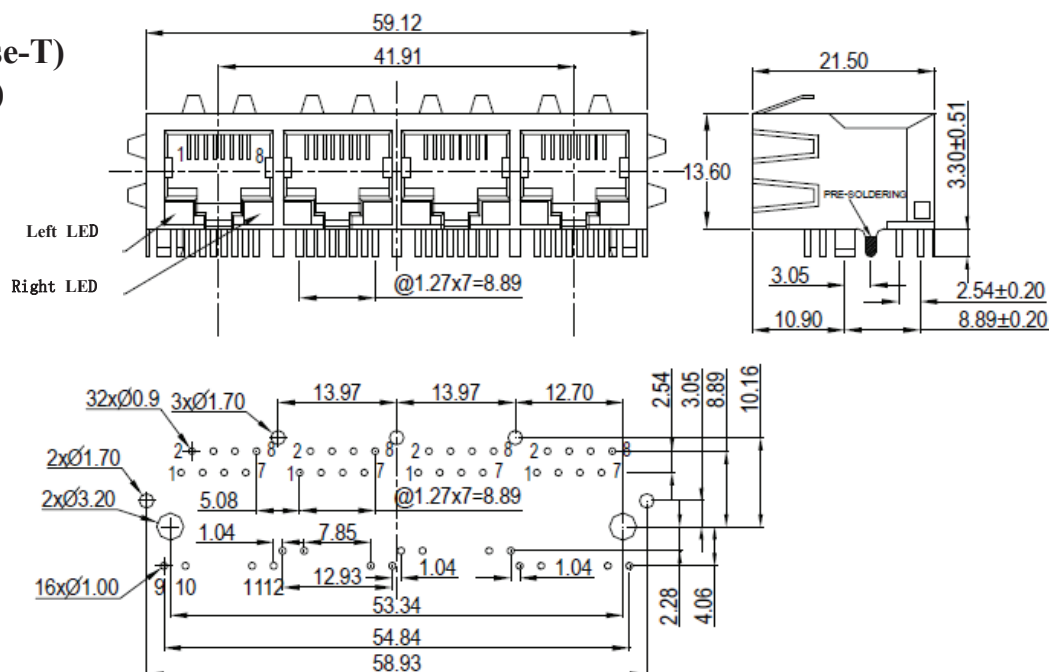
RoHS
Compliant



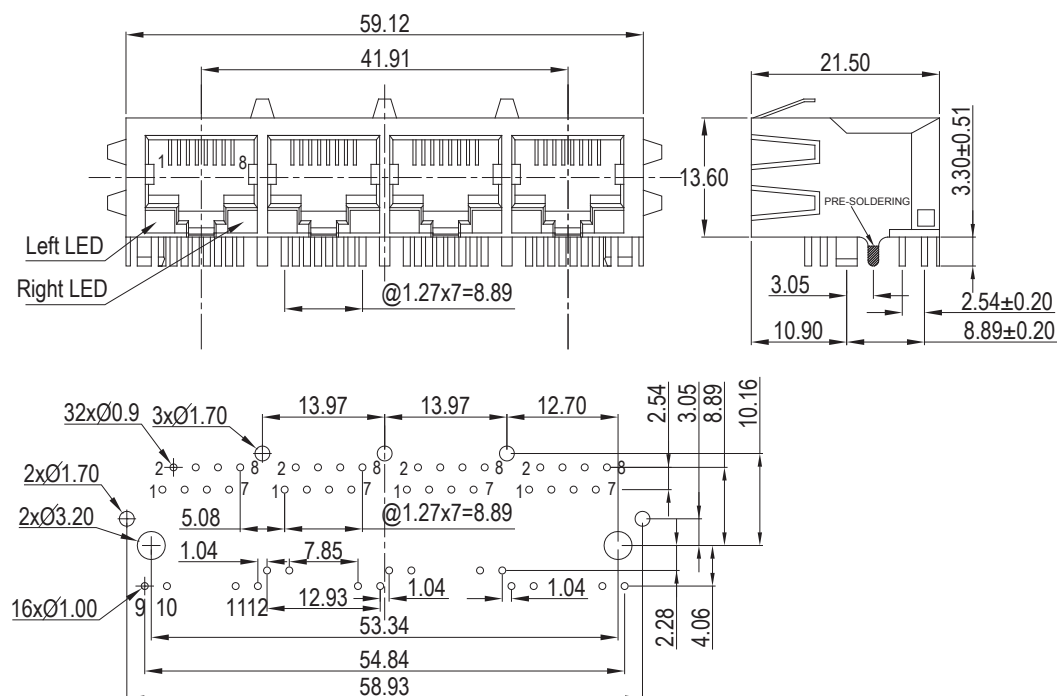
59.12 x 13.60 x 21.50 mm /
58.40 x 11.50 x 17.60 mm

MECHANICAL DIMENSIONS

MA (10/100 Base-T) (8 EMI Fingers)



MB (10/100 Base-T) (3 EMI Fingers)



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MECHANICAL DIMENSIONS

Technical drawings of the LED module showing dimensions and component locations.

Top View (Left): Overall width 59.12. LED pitch @1.27x9=11.43. LED height 13.60. Labels: Left LED, Right LED.

Top View (Right): LED assembly cross-section. Width 21.50. Height 3.30±0.51. Pre-soldering area. Dimensions: 3.05, 10.90, 2.54±0.20, 8.89±0.20.

Bottom View: PCB layout. Dimensions: 58.93 (total width), 10.16 (total height). Hole diameters: 40xØ0.90, 3xØ1.70, 2xØ1.70, 2xØ3.20, 16xØ1.00. Distances: 13.97, 13.97, 12.70, 2.54, 3.05, 8.89, 1.04, 7.85, 11.12, 13.14, 12.93, 1.04, 53.34, 54.84, 58.93, 2.28, 4.06.

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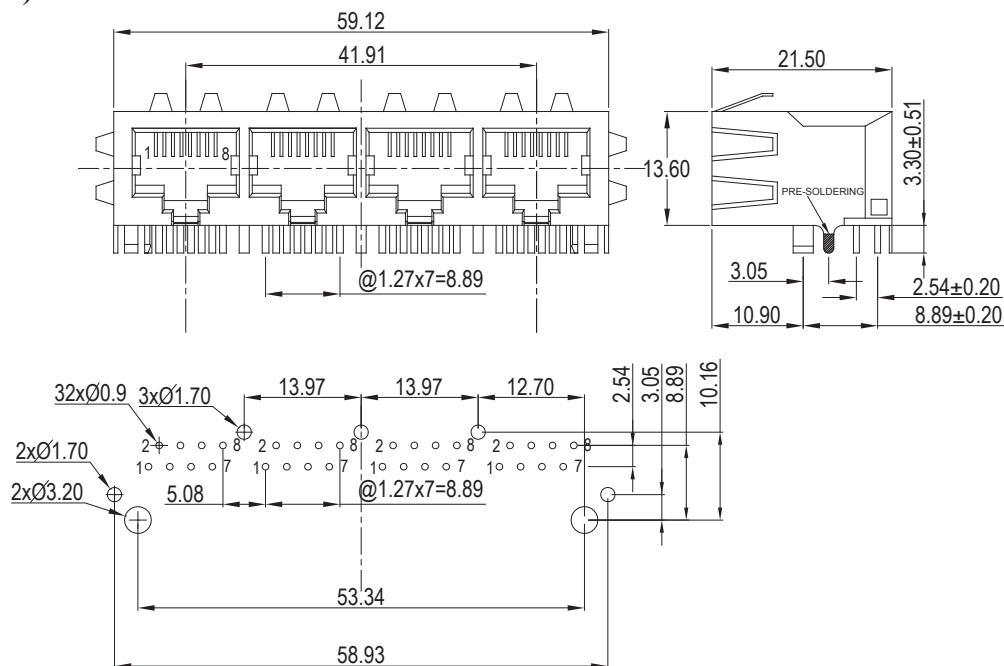
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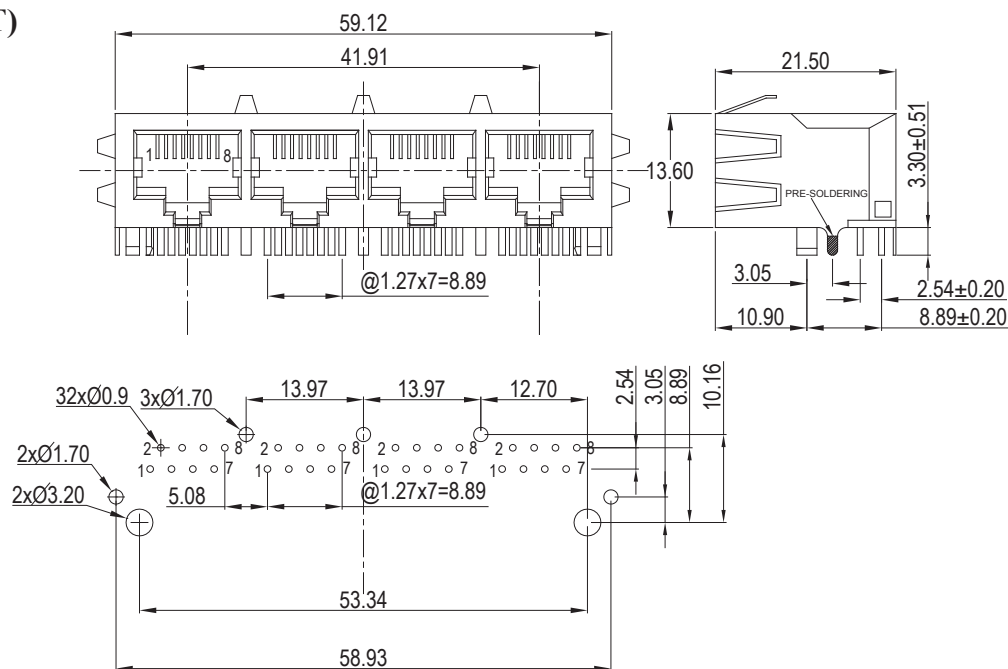
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MECHANICAL DIMENSIONS

ME (10/100 Base-T) (8 EMI Fingers)



MF (10/100 Base-T) (3 EMI Fingers)



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MECHANICAL DIMENSIONS

[illegible]

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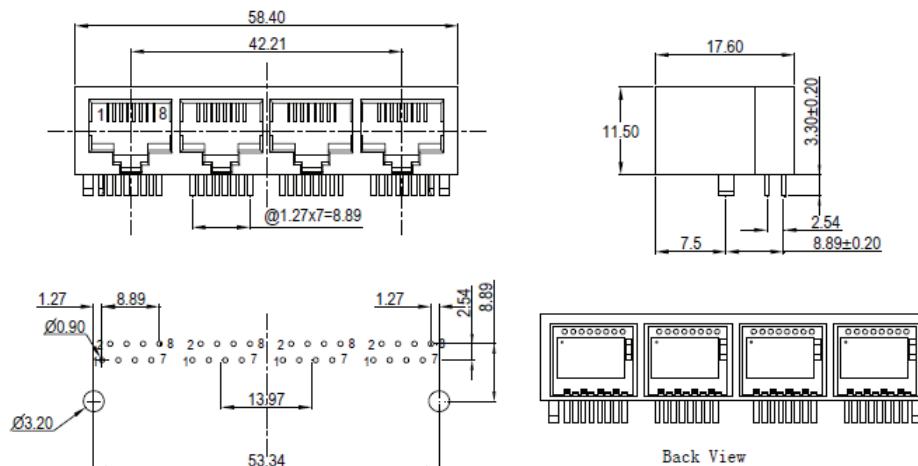
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MECHANICAL DIMENSIONS

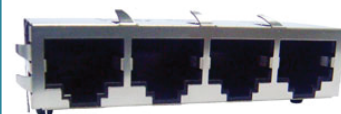
MI (10/100 Base-T)



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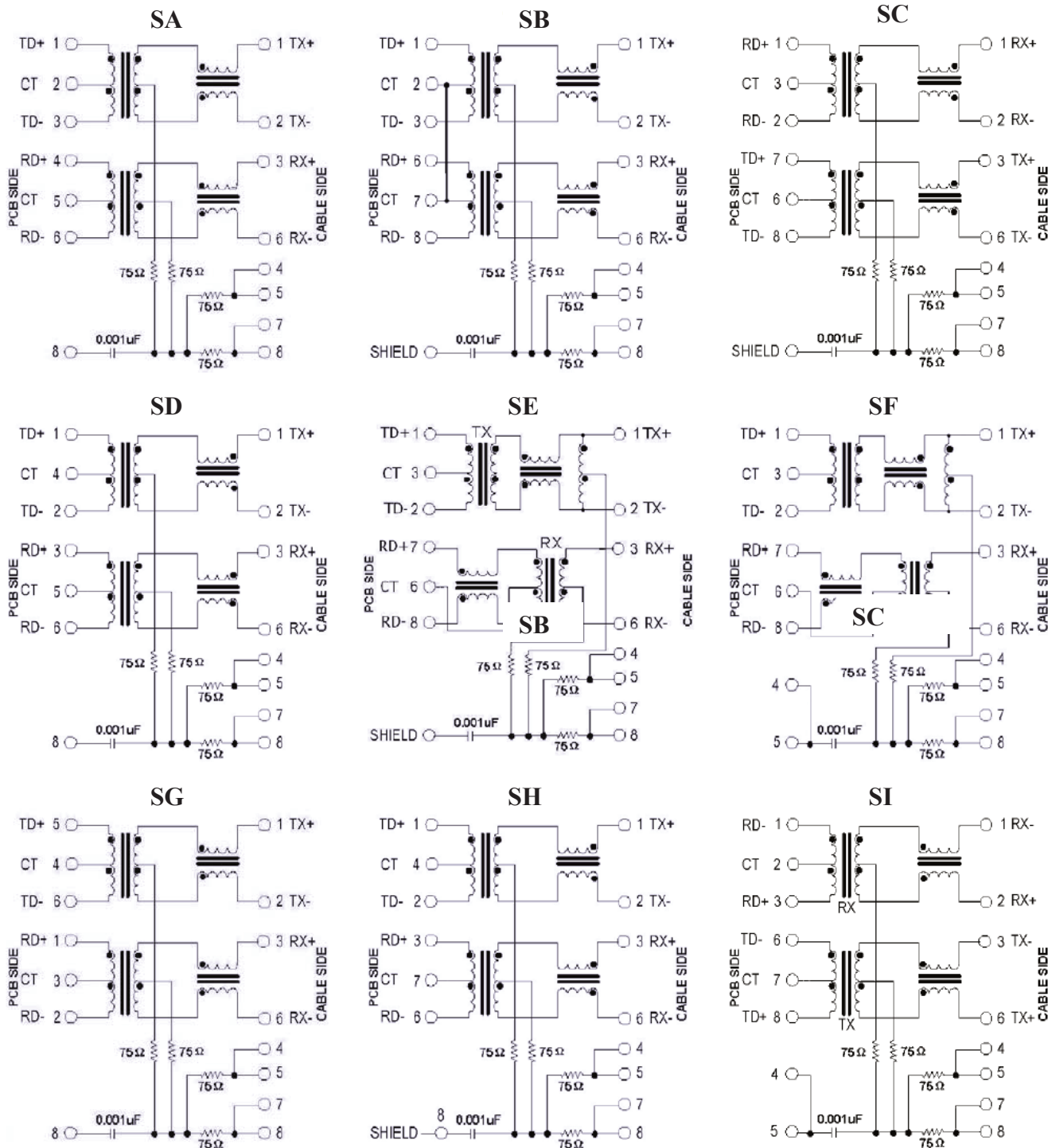
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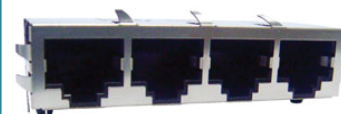
SCHEMATICS



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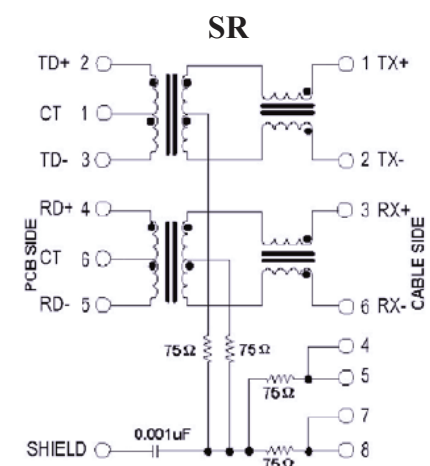
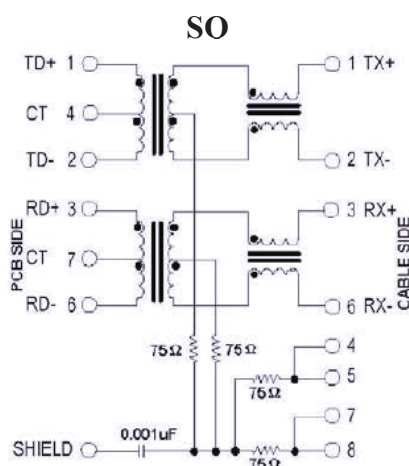
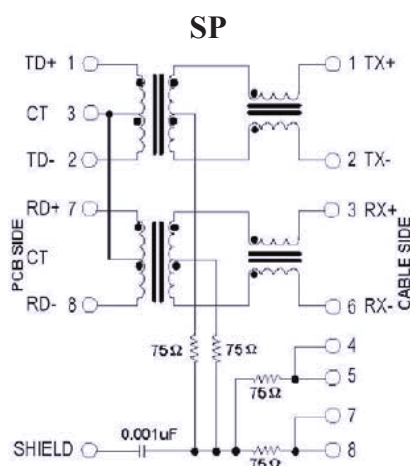
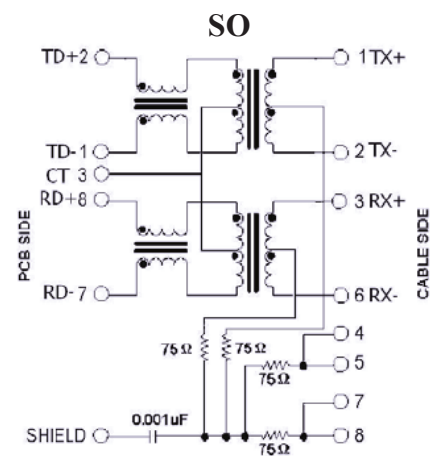
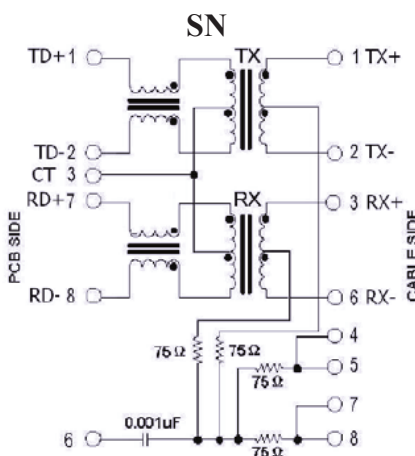
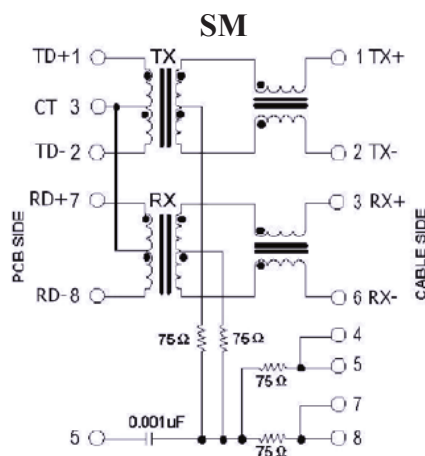
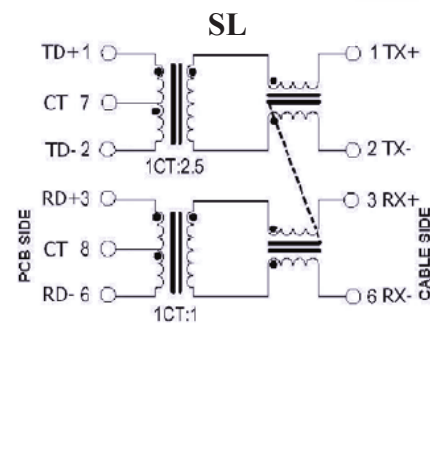
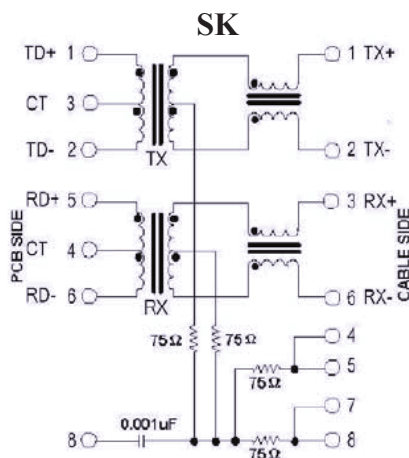
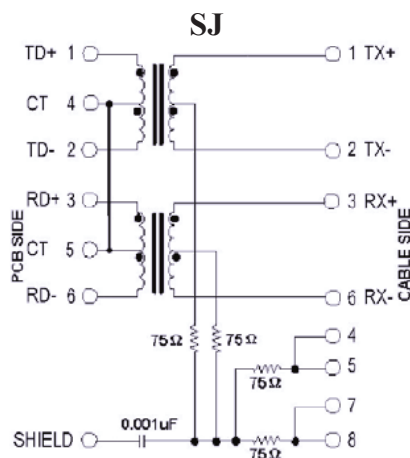
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SCHEMATICS - continued



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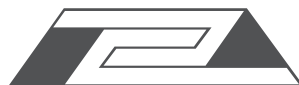
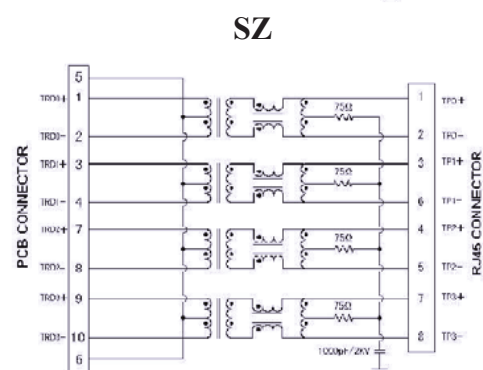
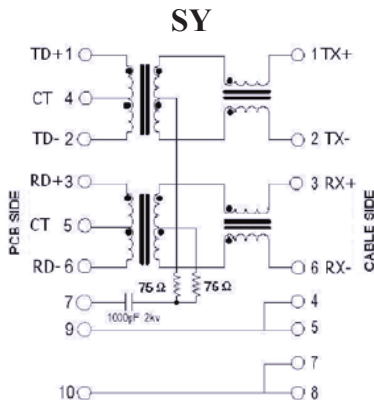
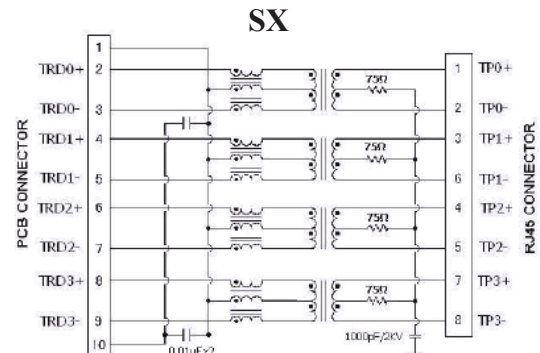
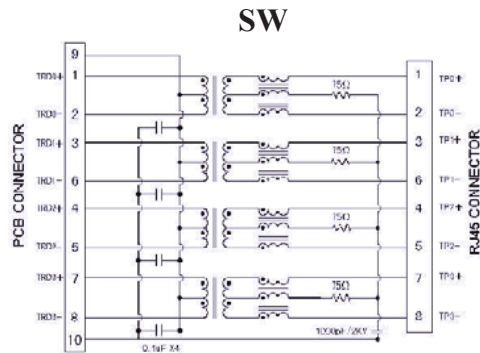
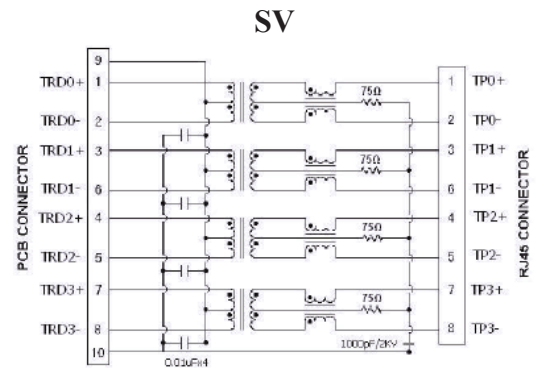
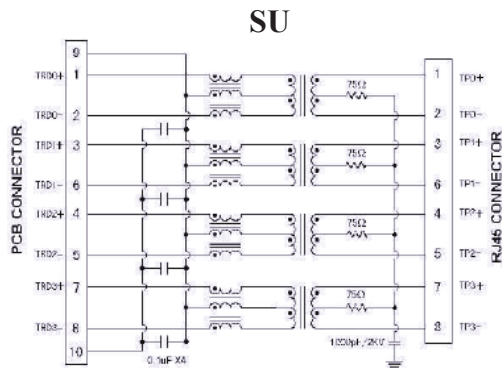
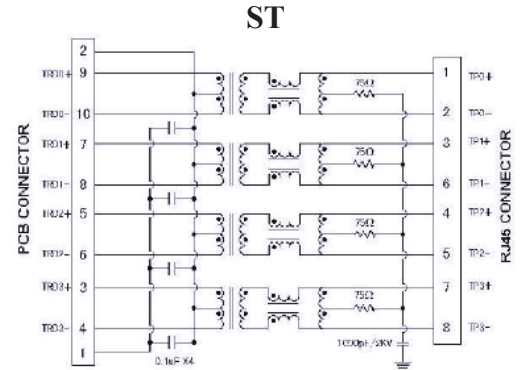
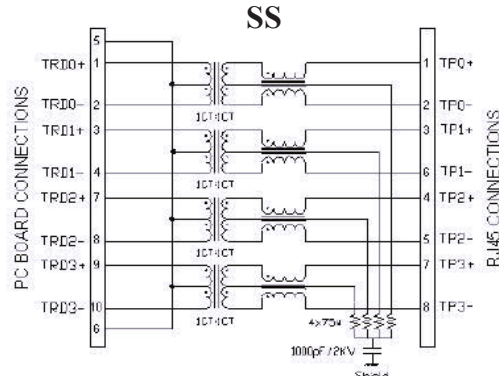


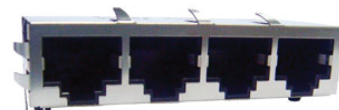
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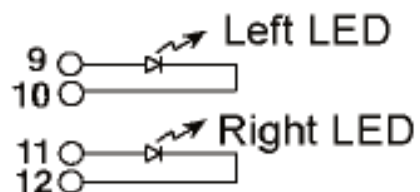


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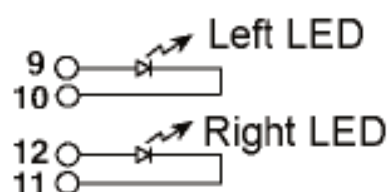
LED POLARITY

8PIN:

E

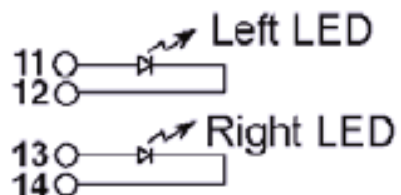


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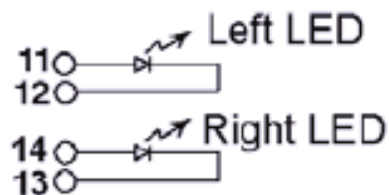


10PIN:

G



H



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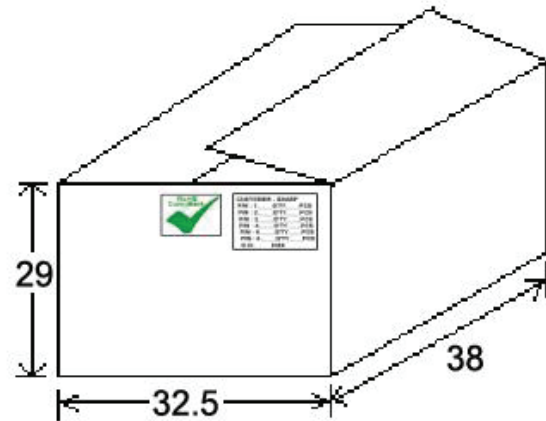
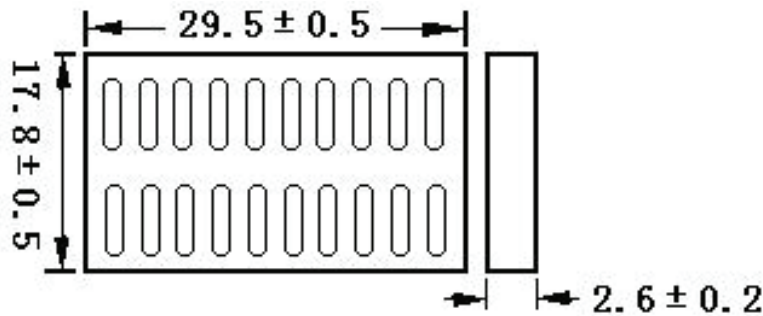


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PACKING: 20pcs/tray

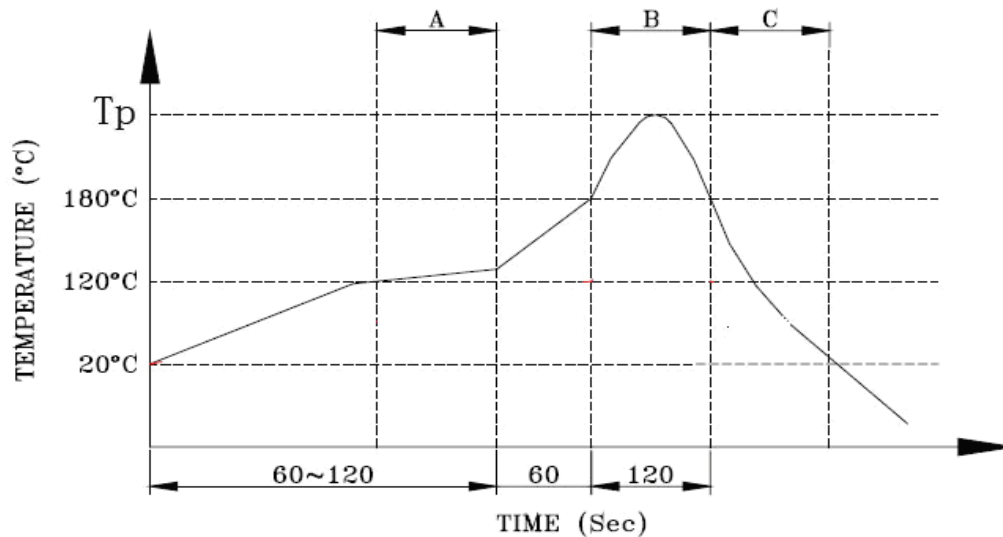
Packaging material: PET

Outer carton unit 400 pcs/ 20 Trays/box



Dimensions: cm

REFLOW PROFILE:



A. Preheating B. Soldering C. Gradual Cooling

Peak temperature(T_p) : $250 \pm 10^\circ\text{C}$
Peak temperature(T_p) time : 5sec max

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