

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



ARJ12A

RoHS  
Compliant

31.28 x 13.60 x 21.50 mm

## FEATURES:

- Tab down
- Available with or without LED
- Suitable CAT 5 & 6 cable and UTP
- Comply IEEE 802.3ab
- LAN Magnetic with RJ4
- 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	Turns Ratio $\pm 5\%$		Tab	EMI Fingers	LEDs	Insertion Loss (dB typ)	Return Loss (dB typ @100 $\Omega$ $\pm 15\%$ )		
	TX	RX					0.3- 100 MHz	1- 10 MHz	30 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

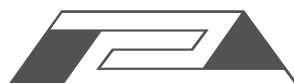
Part Number	Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (Vrms)
	1 - 10 MHz	30 - 60 MHz	60 - 100 MHz	1 - 50 MHz	50 - 130 MHz	
ARJ12A-MASD-A-B-EMU2	-40	-35	-30	-30	-20	1500
ARJ12A-MASD-A-B-FMU2	-40	-35	-30	-30	-20	1500
ARJ12A-MCSD-MU2	-40	-35	-30	-30	-20	1500

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

## OPTIONS AND 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 “



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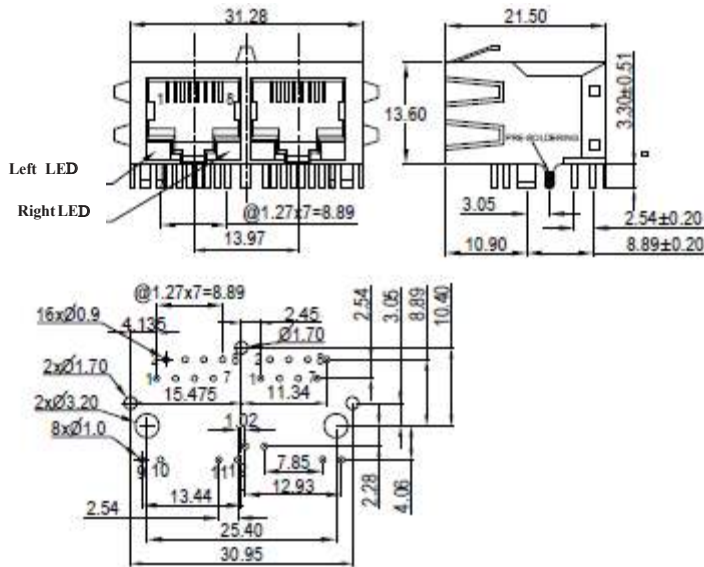


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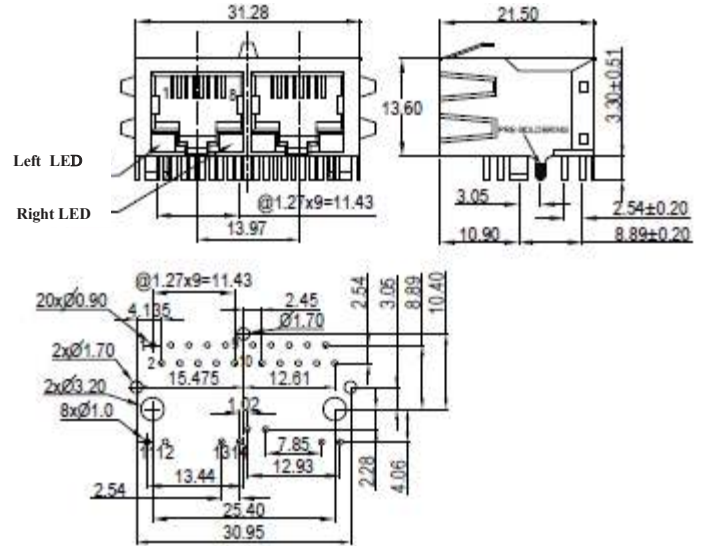
RoHS  
Compliant

## MECHANICAL DIMENSIONS

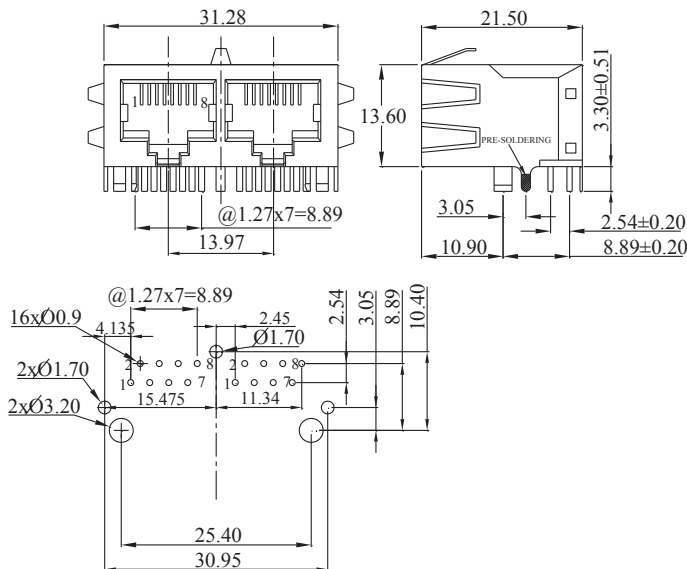
**MA (10/100 Base-T)**



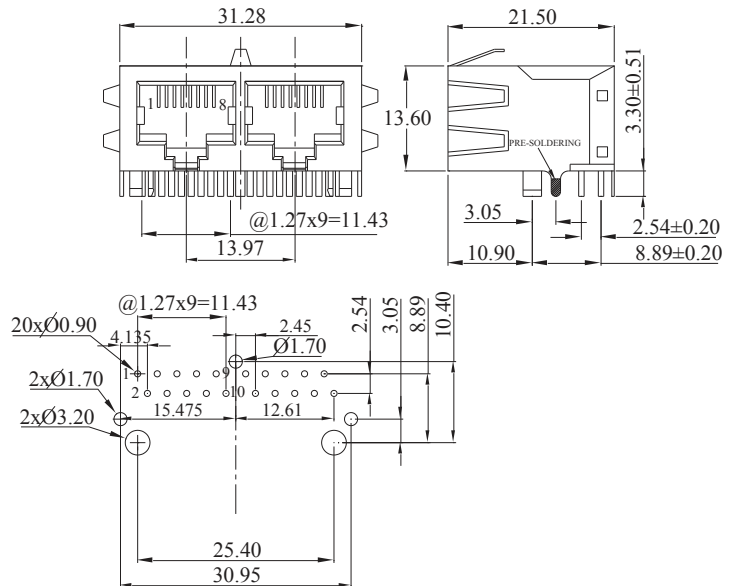
**MB (1000 Base-T)**



**MC (10/100 Base-T)**



**MD (1000 Base-T)**



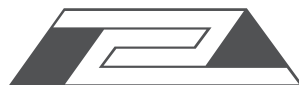
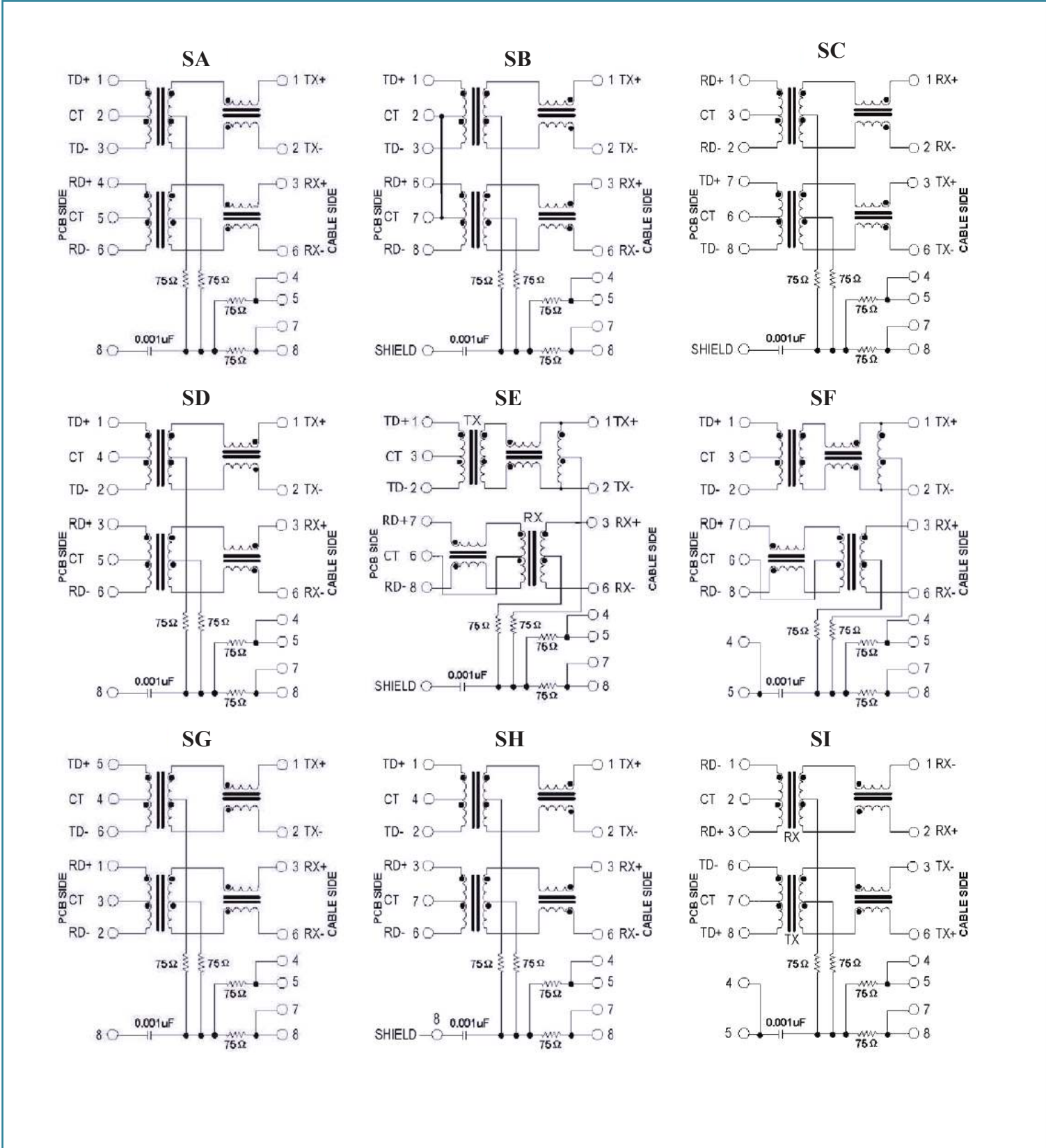
Dimension: mm. All tolerances are ±0.25 unless otherwise specified



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## SCHEMATICS



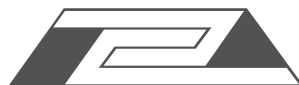
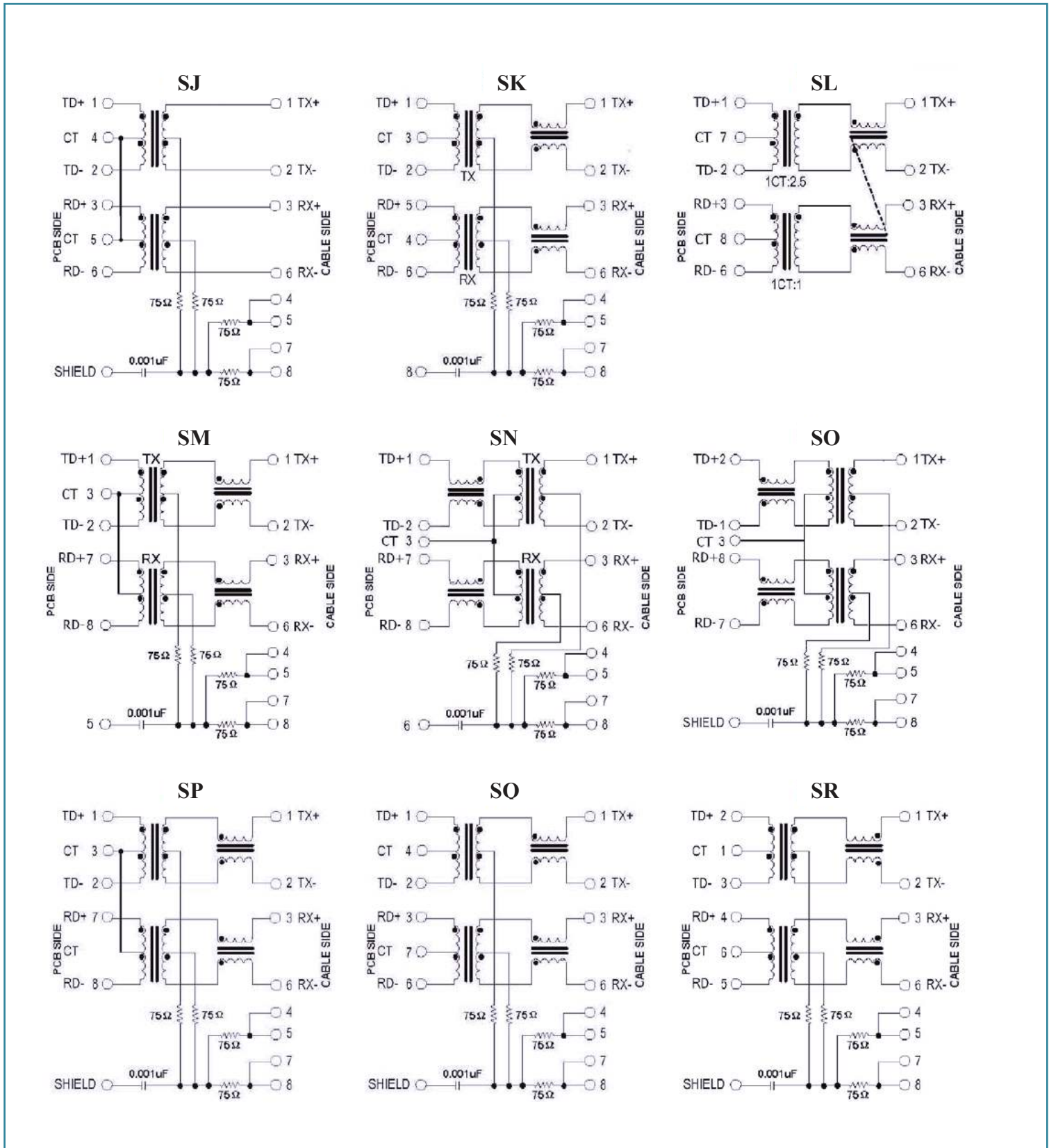
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## SCHEMATICS - continued



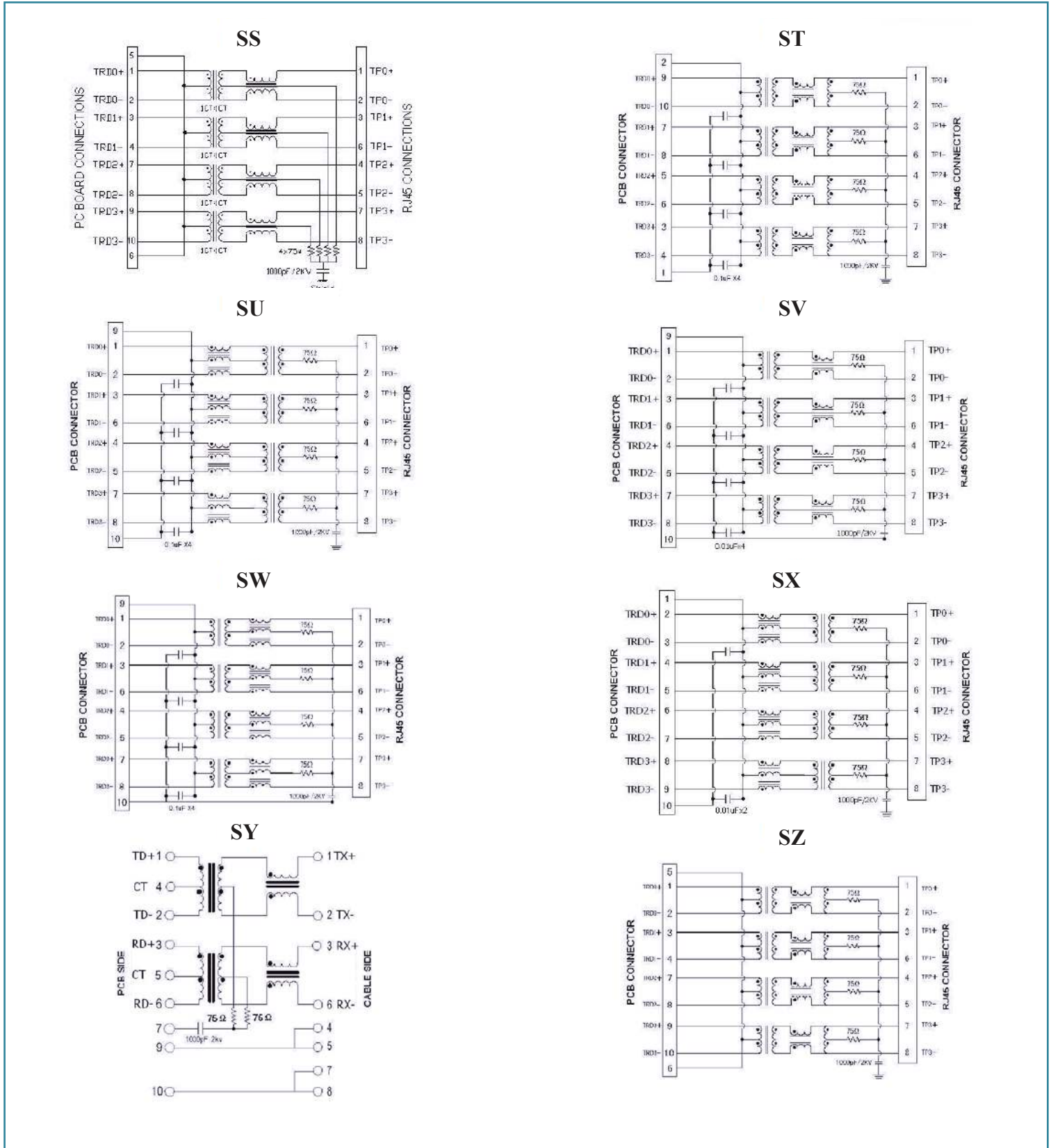




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## SCHEMATICS



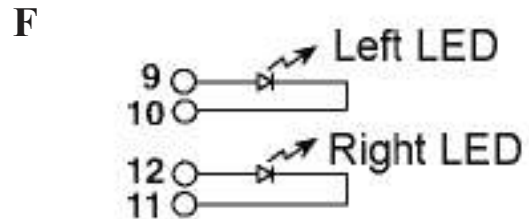
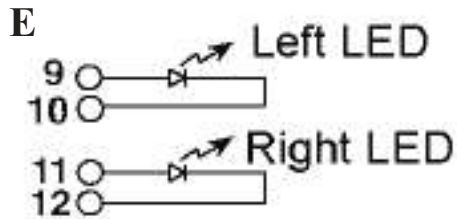


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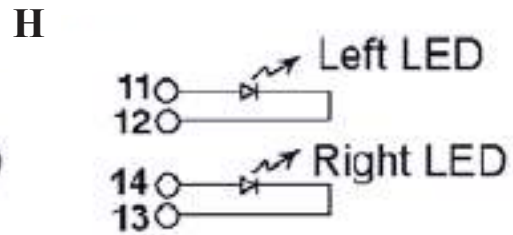
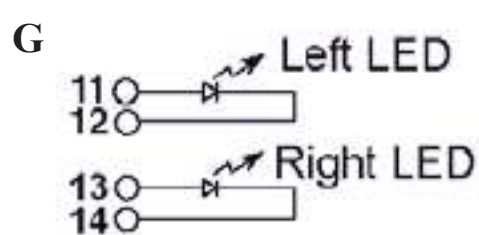
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## LED POLARITY

### 8PIN:



### 10PIN:



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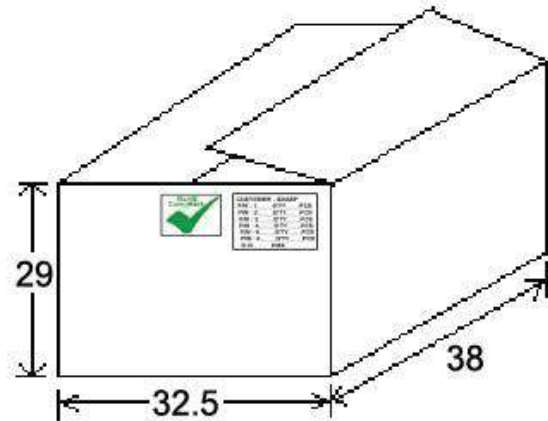
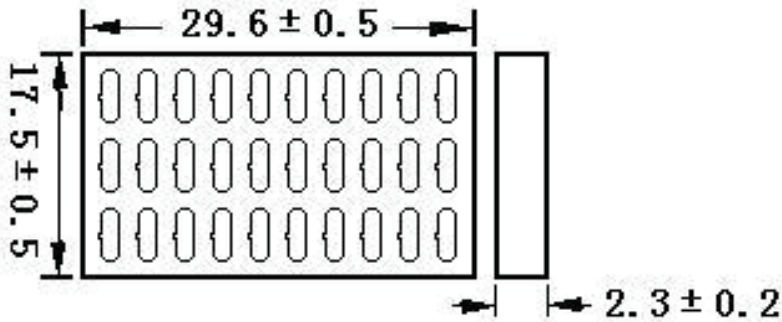
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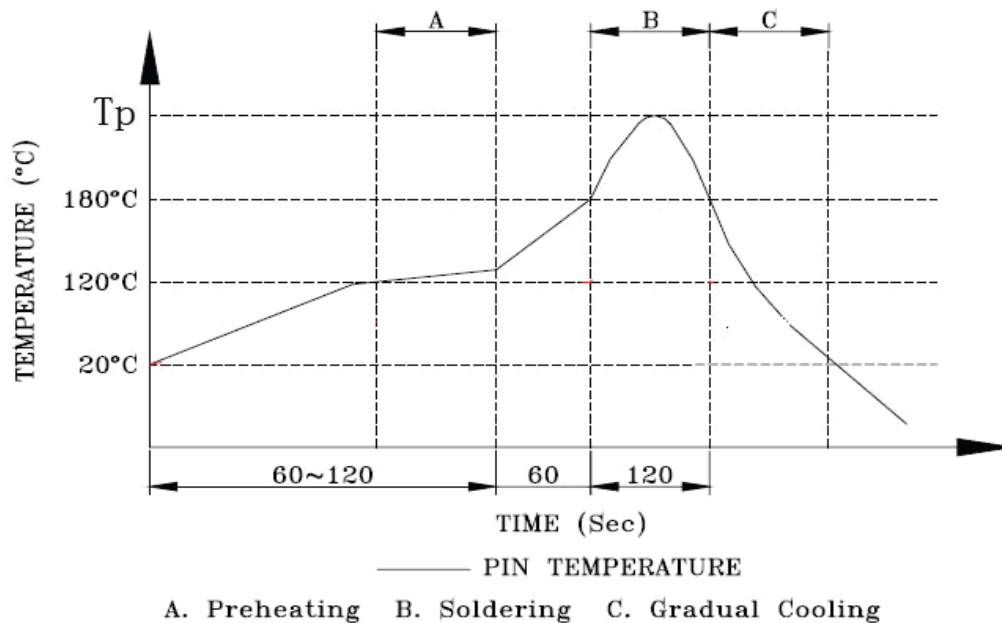
PACKING: 30pcs/tray

Packaging material: PET

Outer carton unit : 600 pcs/ 20 Trays/box



REFLOW PROFILE:



Peak temperature(Tp) : 250± 10°C  
Peak temperature(Tp) time : 5sec max

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