

# RJ45 10/100/1000 Base-TX 2x1 Jack with Magnetic Module

ARJ21A

RoHS  
Compliant



17.27 x 28.40 x 25.30 mm

## FEATURES:

- Upper tab up, lower tab down
- Available with or without LED
- Suitable CAT 5 & 6 cable and UTP
- Comply IEEE 802.3ab
- LAN Magnetic with RJ45 Jack
- Suitable for RoHS compliant reflow

## APPLICATIONS:

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

## STANDARD SPECIFICATIONS

Operating temperature range: 0°C to +70°C Storage temperature range: -40°C to +85°C (after unpacked from the tray)

Part Number	Ratio ± 5%		EMI Fingers	LEDs L/R	Insertion Loss (dB Max)		Return Loss (dB Min @100Ω±15%)	
	TX	RX			1 - 80 MHz	100 MHz	1- 60 MHz	60 - 100 MHz
ARJ21A-MCSA-LU2	1CT:1	1CT:1CT	Yes	No	-1.0	-1.2	-16	-12
ARJ21A-MCSB-MU2	1CT:1CT	1CT:1CT	Yes	No	-1.0	-1.2	-14	-10
ARJ21A-MCSC-MU2	1CT:1CT	1CT:1CT	Yes	No	-1.0	-1.2	-14	-10
ARJ21A-MCSD-MU2	1CT:1CT	1CT:1CT	Yes	No	-1.0	-1.2	-14	-10
ARJ21A-MBSD-A-B-EMU2	1CT:1CT	1CT:1CT	No	G/Y	-1.0	-1.2	-14	-10

Part Number	Crosstalk (dB TYP)	Common Mode Rejection (dB TYP)	Hipot (Vrms)
	1 - 100 MHz	1 - 100 MHz	@ 60 Hz
ARJ21A-MCSA-LT2	-35	-30	1500
ARJ21A-MCSB-MU2	-35	-30	1500
ARJ21A-MCSC-MU2	-35	-30	1500
ARJ21A-MCSD-MU2	-35	-30	1500
ARJ21A-MBSD-A-B-EMU2	-35	-30	1500

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

## OPTIONS AND PART IDENTIFICATION

ARJ21A - [ ] [ ] - [ ] - [ ] - [ ] [ ] [ ] [ ]

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 ~ SQ (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 (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	2: 6u “ 3: 15u “ 4: 30u “ 5: 50u “



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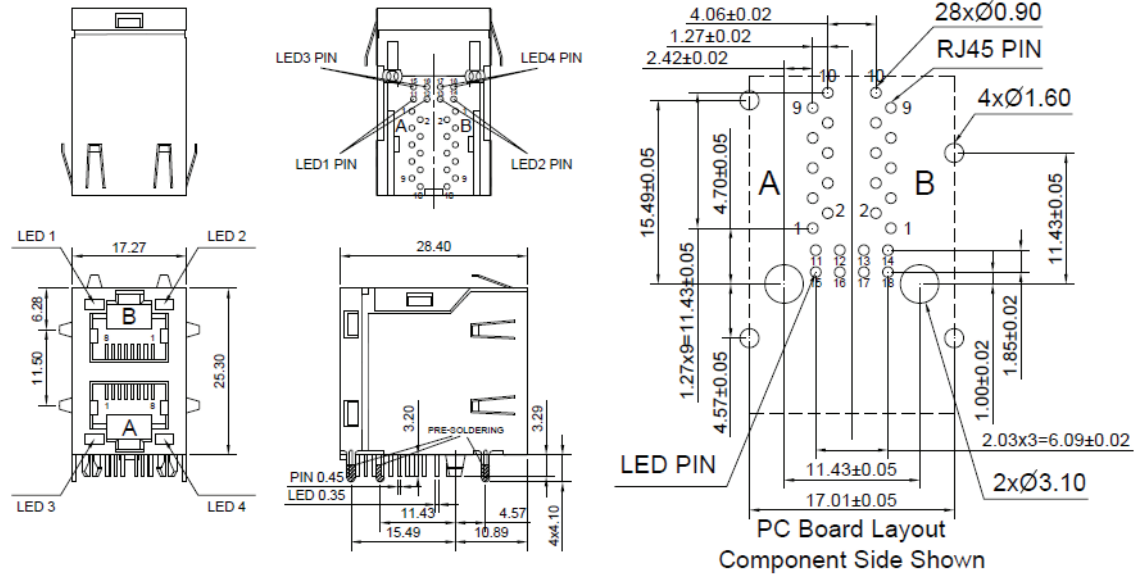
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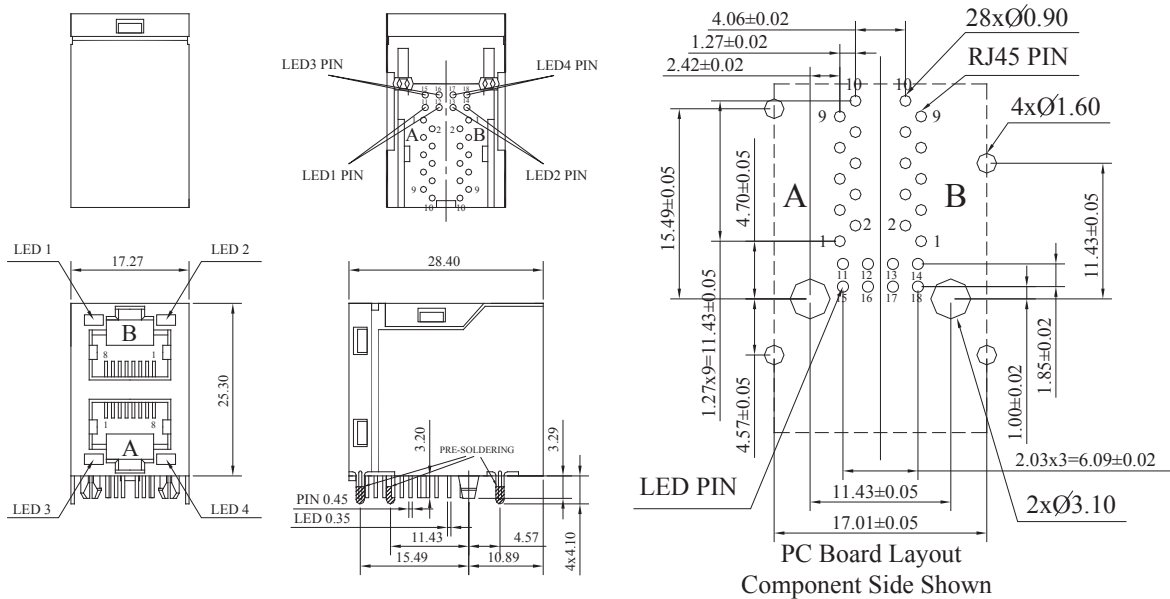
17.27 x 28.40 x 25.30 mm

## MECHANICAL DIMENSIONS

MA



MB



Dimension: mm. Tolerances: .X =  $\pm 0.38$ , .XX =  $\pm 0.25$

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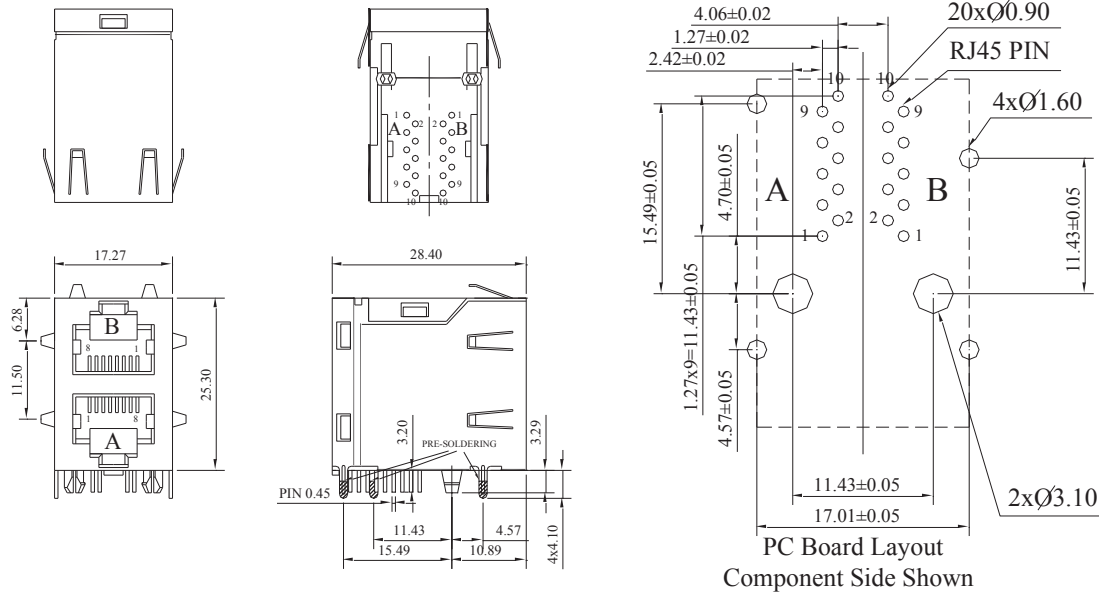
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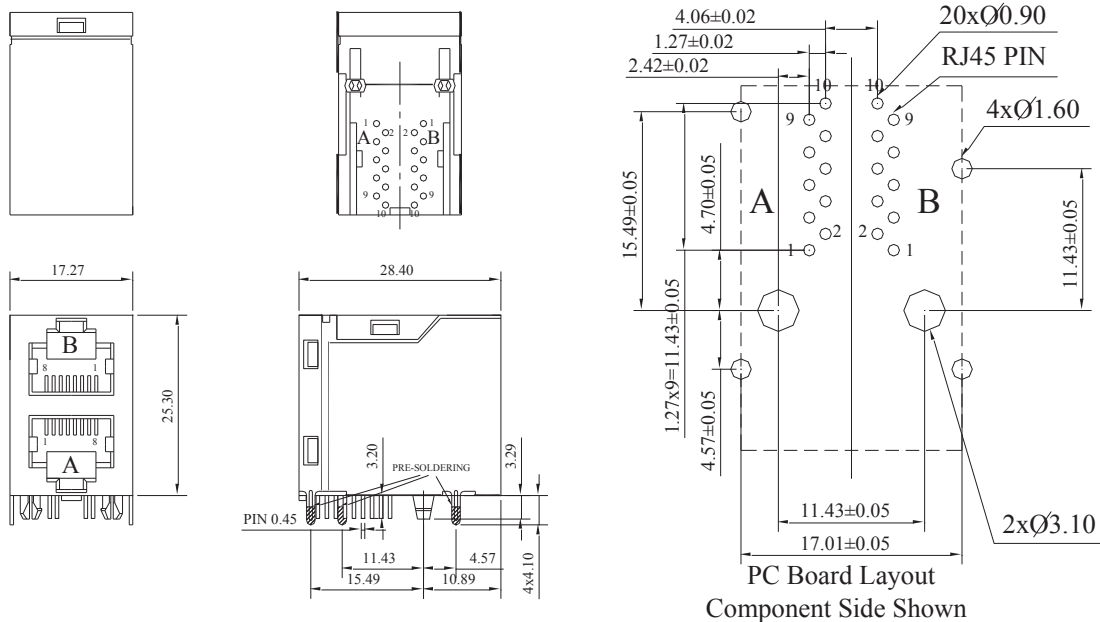
17.27 x 28.40 x 25.30 mm

## MECHANICAL DIMENSIONS

### MC



### MD



Dimension: mm. Tolerances: .X = ±0.38, .XX = ±0.25

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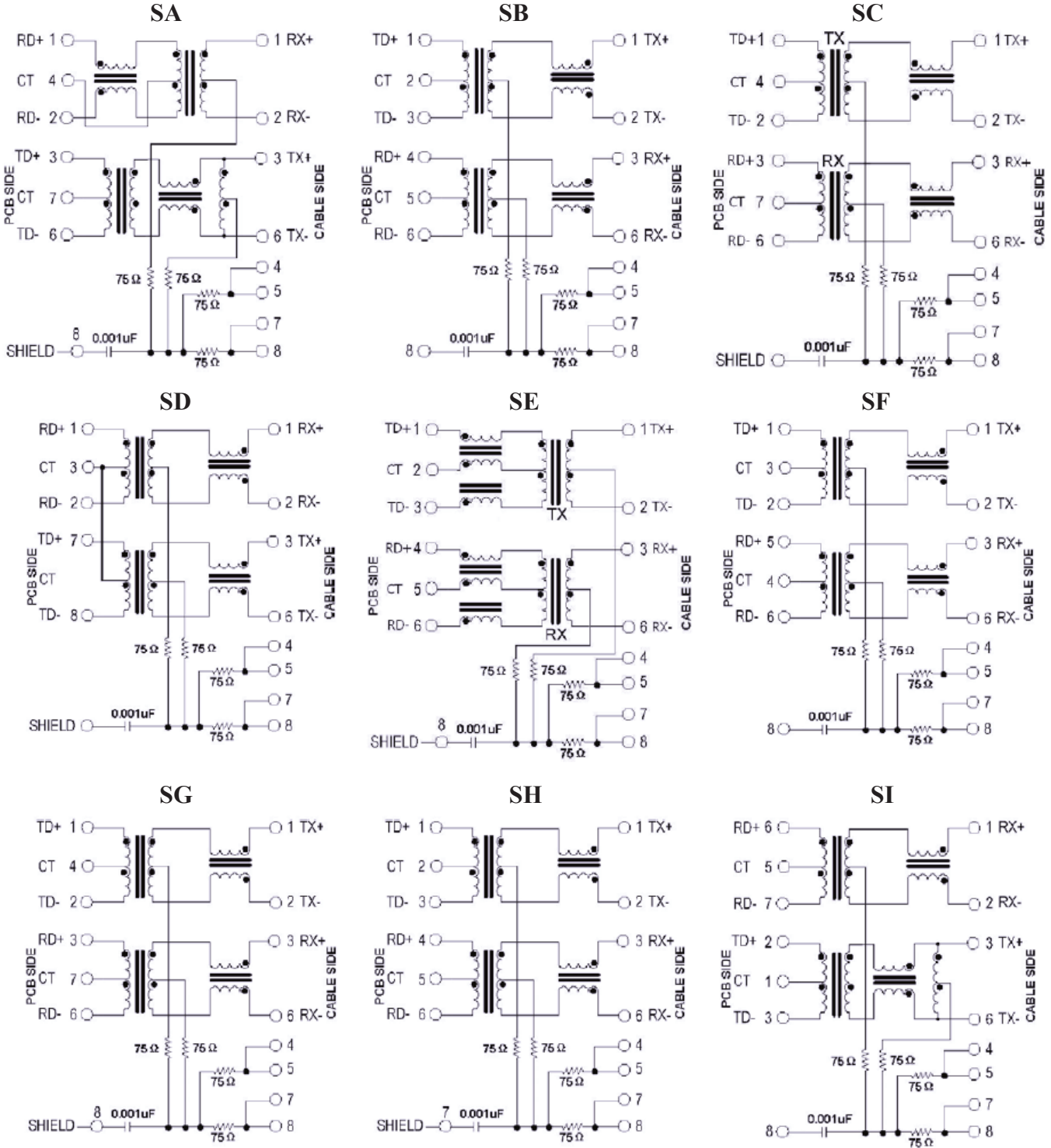
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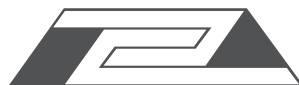


17.27 x 28.40 x 25.30 mm

## SCHEMATICS



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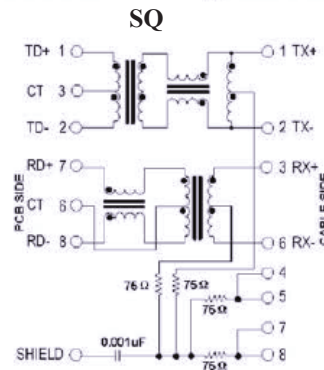
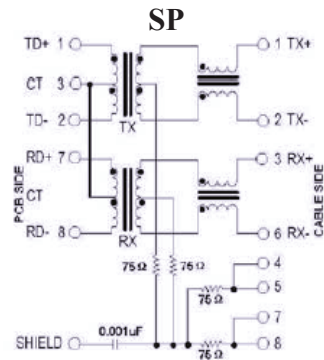
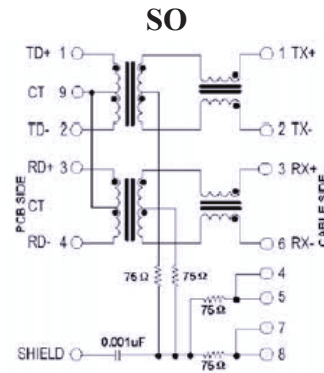
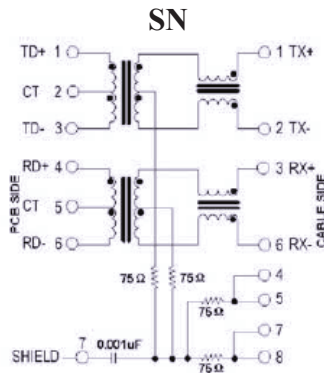
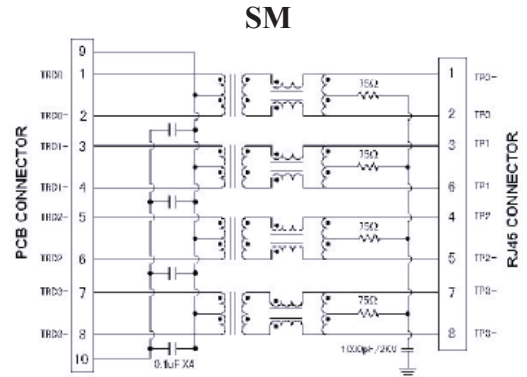
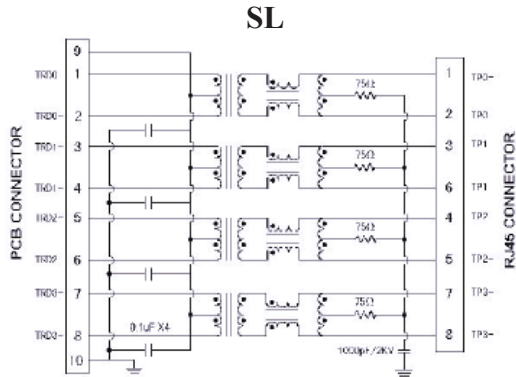
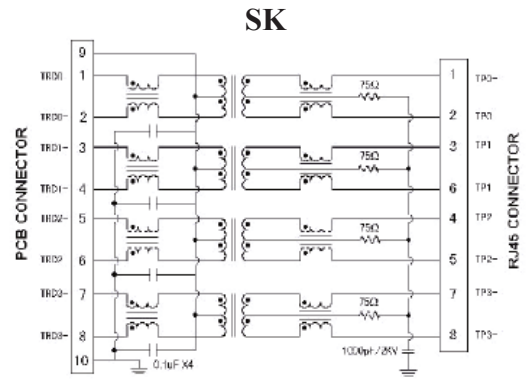
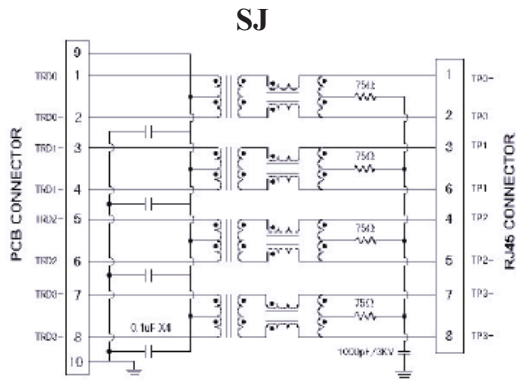
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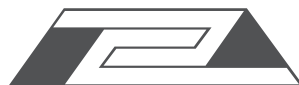
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## SCHEMATICS



Note: 10/100 Base-T for Schematics SA~SI, SN~SQ; 10/100/1000 Base-T for Schematics SJ~SM.

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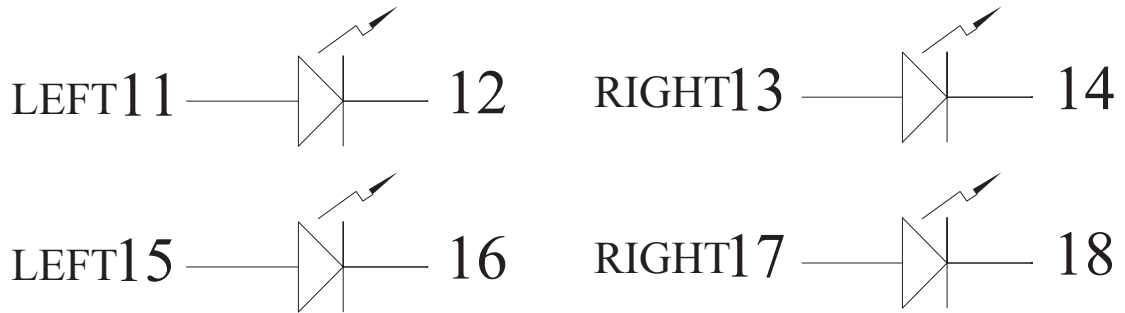
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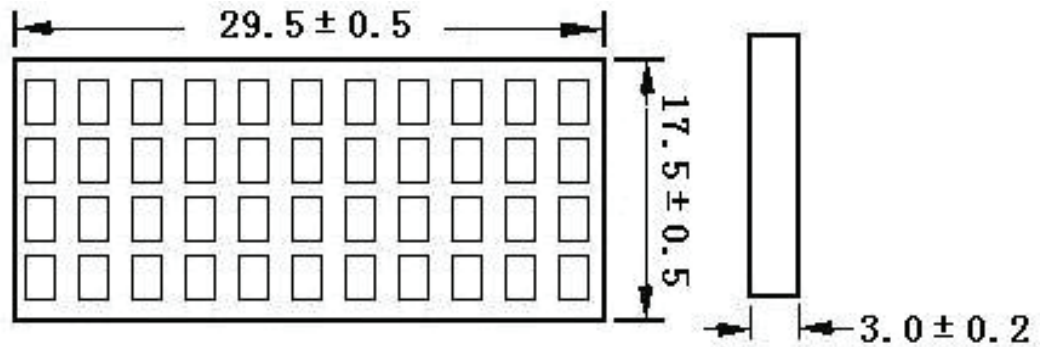
## LED POLARITY

E

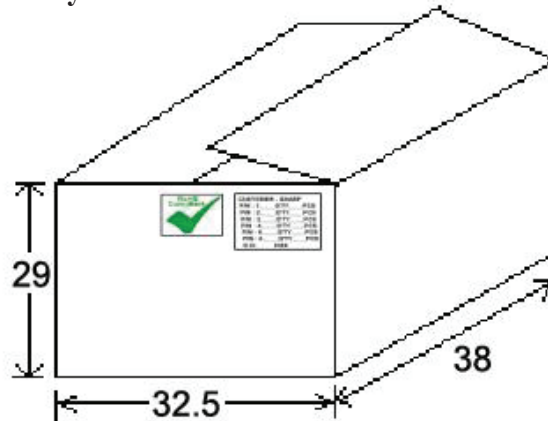


## PACKING: 44pcs/tray

Packaging material: PET



Outer carton unit : 704 pcs/ 16 Trays/box



Dimensions: cm

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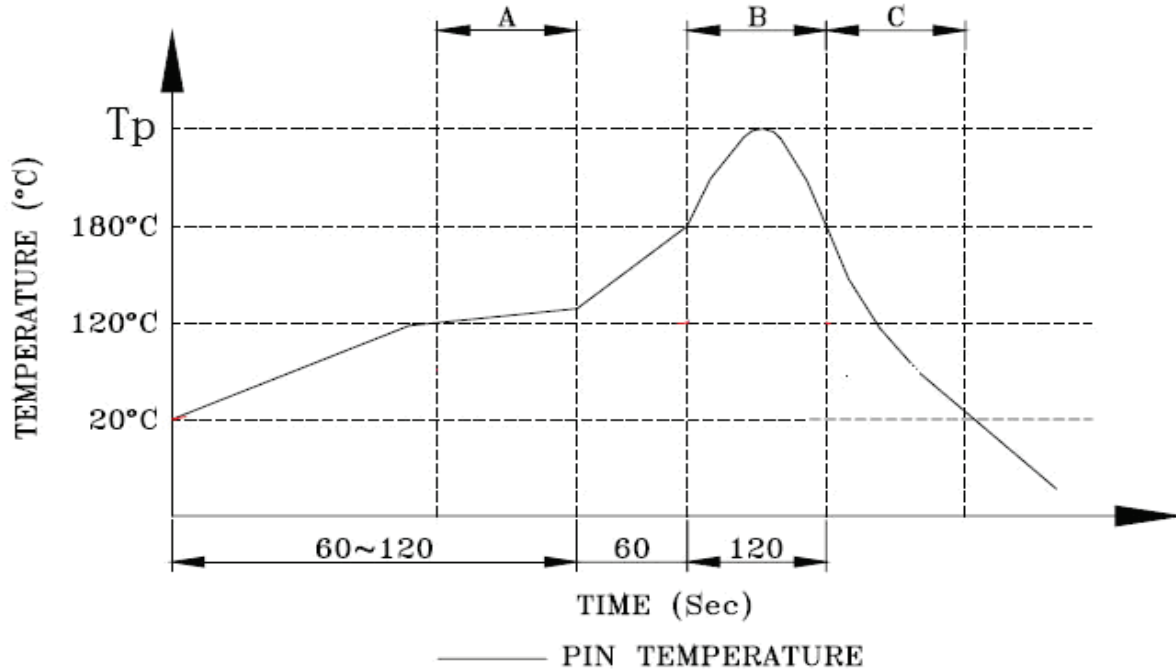
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## REFLOW PROFILE:



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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