

# RJ45 1000 Base-TX Jack with Magnetic Module

ARJ11E

RoHS  
Compliant



16.26 x 13.84 x 21.59mm

## FEATURES:

- 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:

- 1000 Base-TX 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 | EMI Fingers | LEDs | Insertion Loss (dB MAX) | Return Loss (dB MIN @100Ω±15Ω) |                     |                     |                   |
|----------------------|-------------|-------------|------|-------------------------|--------------------------------|---------------------|---------------------|-------------------|
|                      |             |             | L/R  | 0.3-100MHz              | 1- 30 MHz                      | 40 MHz              | 50 MHz              | 60 – 80 MHz       |
| ARJ11E-M□ SA-A-B-ΔM2 | 1CT:1CT     | Yes         | G/Y  | -1.2dB                  | -16                            | -13.5               | -11.5               | -10               |
| ARJ11E-M□ SB-A-B-ΔU2 | 1CT:1CT     | Yes         | G/Y  | -1.2dB                  | -16                            | -13.5               | -11.5               | -10               |
| ARJ11E-M□ SC-A-B-ΔL2 | 1CT:1       | Yes         | G/Y  | -1.2dB                  | -16                            | -13.5               | -11.5               | -10               |
| ARJ11E-M□ SD-A-B-ΔM2 | 1CT:1CT     | Yes         | G/Y  | -1.2dB                  | -16                            | -13.5               | -11.5               | -10               |
| ARJ11E-MASA-M2       | 1CT:1CT     | Yes         | NA   | -1.2dB                  | -16                            | -13.5               | -11.5               | -10               |
| ARJ11E-MASB-M2       | 1CT:1CT     | Yes         | NA   | -1.2dB                  | -16                            | -13.5               | -11.5               | -10               |
| ARJ11E-MASC-L2       | 1CT:1       | Yes         | NA   | -1.2dB                  | -16                            | -13.5               | -11.5               | -10               |
| ARJ11E-MASD-M2       | 1CT:1CT     | Yes         | NA   | -1.2dB                  | -16                            | -13.5               | -11.5               | -10               |
| ARJ11E-MDSA-A-B-FM2  | 1CT:1CT     | No          | G/Y  | -1.0dB<br>(1-100MHz)    | -16                            | -13.5<br>(30-40MHz) | -11.5<br>(40-50MHz) | -10<br>(50-80MHz) |

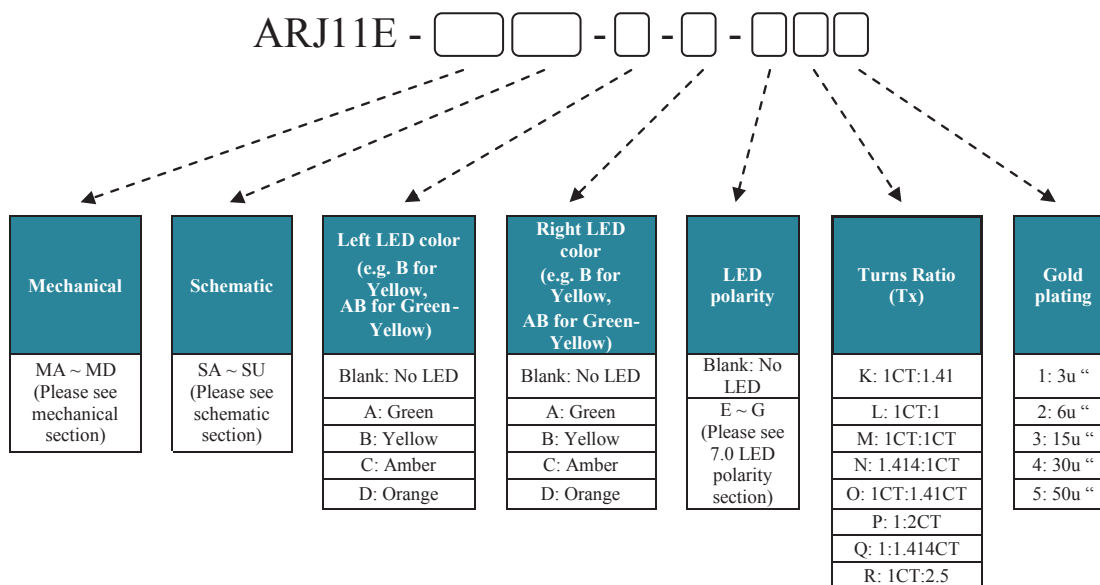
| Part Number          | Crosstalk (dB MIN) |                   |                    | Differential to Common Mode Rejection (dB MIN) |                       |                        | Hipot (Vrms) |
|----------------------|--------------------|-------------------|--------------------|------------------------------------------------|-----------------------|------------------------|--------------|
|                      | 30 MHz             | 60 MHz            | 100 MHz            | 30 MHz                                         | 60 MHz                | 100 MHz                |              |
| ARJ11E-M□ SA-A-B-ΔM2 | -40                | -36               | -30                | -35                                            | -32                   | -30                    | 1500         |
| ARJ11E-M□ SB-A-B-ΔU2 | -40                | -36               | -30                | -35                                            | -32                   | -30                    | 1500         |
| ARJ11E-M□ SC-A-B-ΔL2 | -40                | -36               | -30                | -35                                            | -32                   | -30                    | 1500         |
| ARJ11E-M□ SD-A-B-ΔM2 | -40                | -36               | -30                | -35                                            | -32                   | -30                    | 1500         |
| ARJ11E-MASA-M2       | -40                | -36               | -30                | -35                                            | -32                   | -30                    | 1500         |
| ARJ11E-MASB-M2       | -40                | -36               | -30                | -35                                            | -32                   | -30                    | 1500         |
| ARJ11E-MASC-L2       | -40                | -36               | -30                | -35                                            | -32                   | -30                    | 1500         |
| ARJ11E-MASD-M2       | -40                | -36               | -30                | -35                                            | -32                   | -30                    | 1500         |
| ARJ11E-MDSA-A-B-FM2  | -40<br>(0.3-30MHz) | -35<br>(30-60MHz) | -30<br>(60-100MHz) | -30<br>(CMR,1-30MHz)                           | -25<br>(CMR,30-60MHz) | -20<br>(CMR,60-125MHz) | 1500         |

□ : Mechanical Option: B or C

Δ : LED Polarity Option: E, F or G

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

## OPTIONS AND PART IDENTIFICATION



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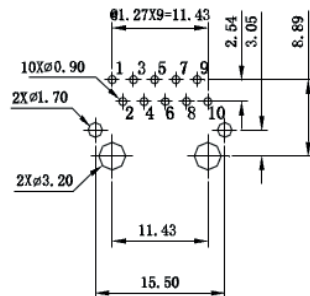
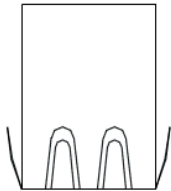
RoHS  
Compliant



16.26 x 13.84 x 21.59mm

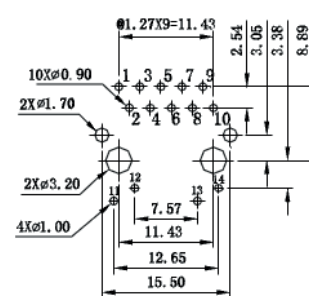
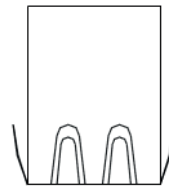
## MECHANICAL DIMENSIONS

MA



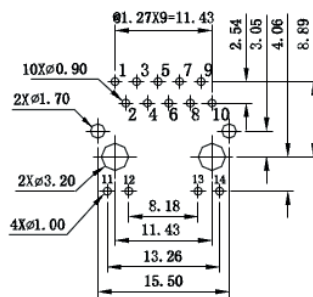
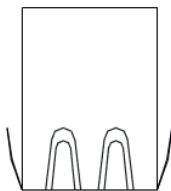
PC Board Layout  
Component Side Shown

MB



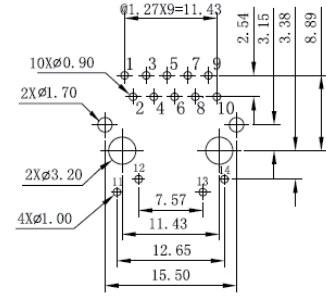
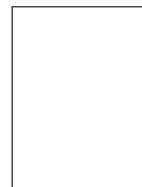
PC Board Layout  
Component Side Shown

MC

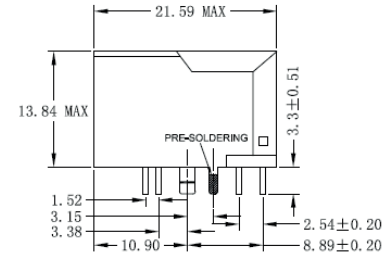
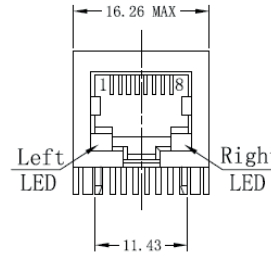
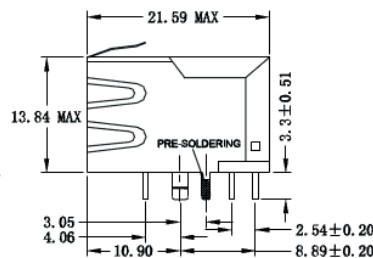
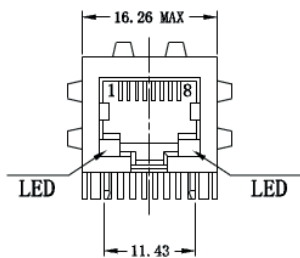
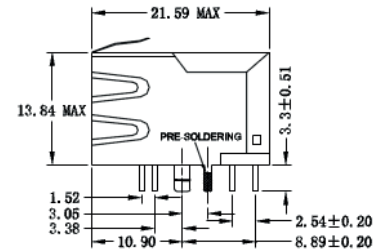
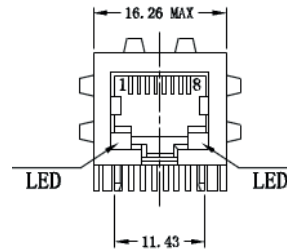
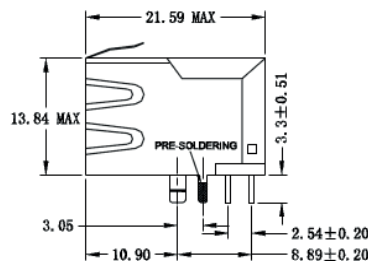
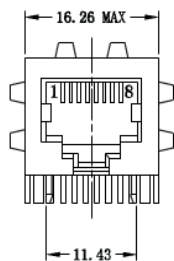


PC Board Layout  
Component Side Shown

MD



PC Board Layout  
Component Side Shown



Dimension: mm. All tolerances are  $\pm 0.25$

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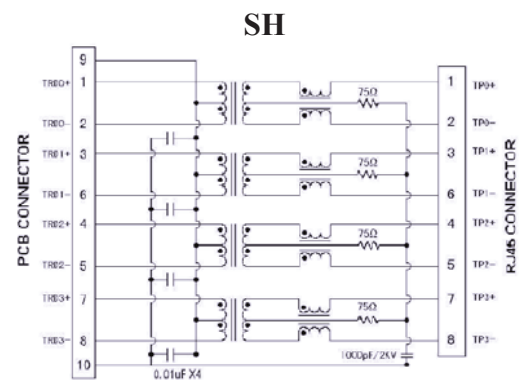
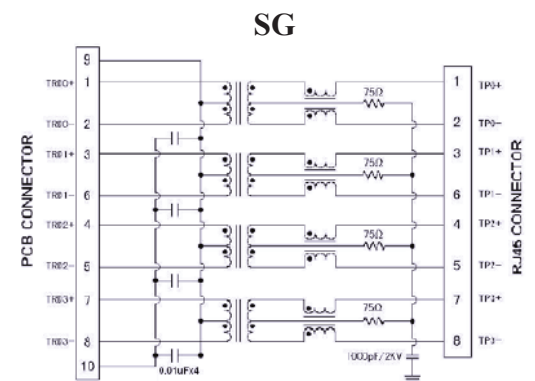
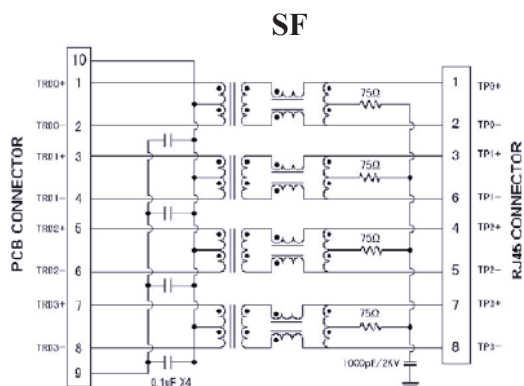
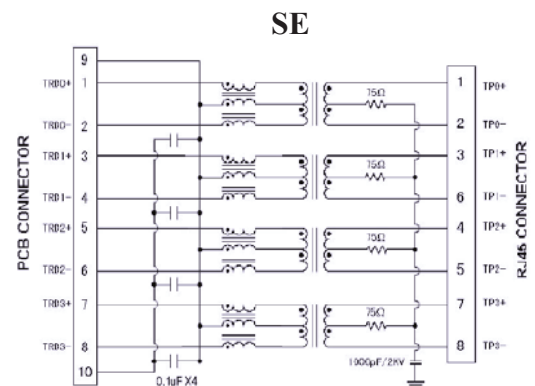
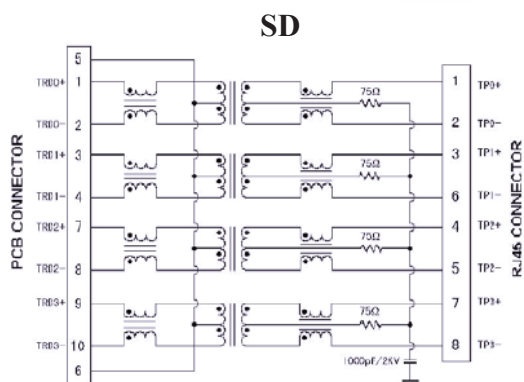
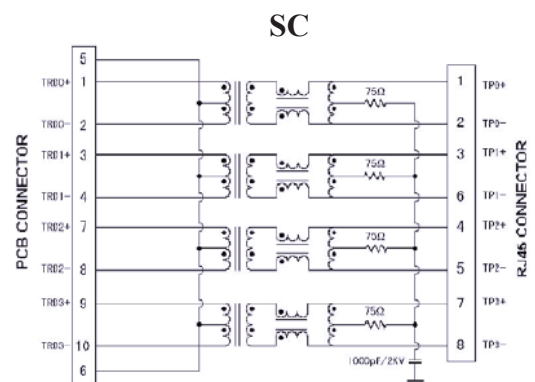
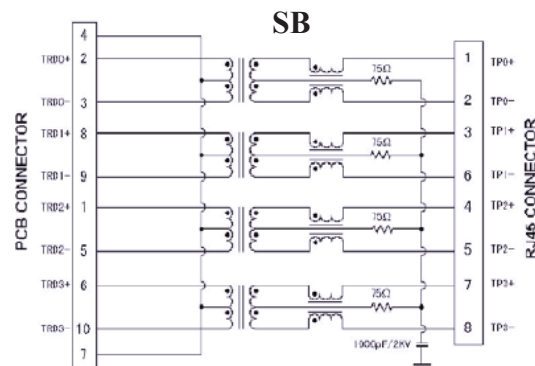
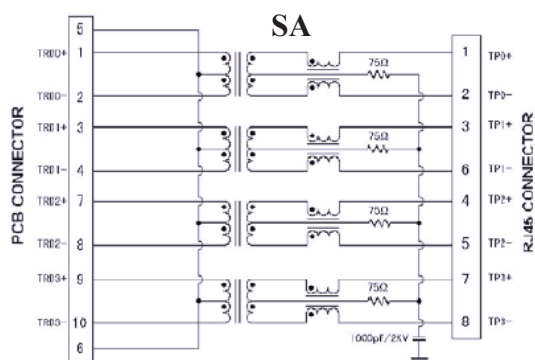
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## SCHEMATICS



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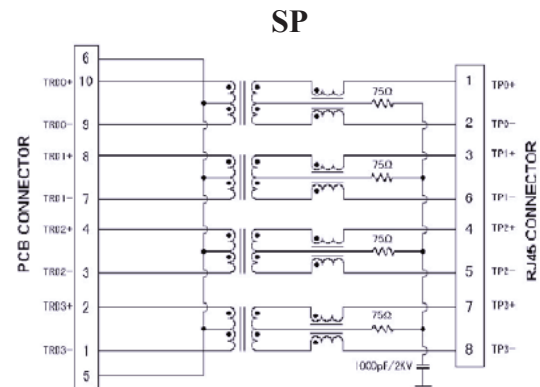
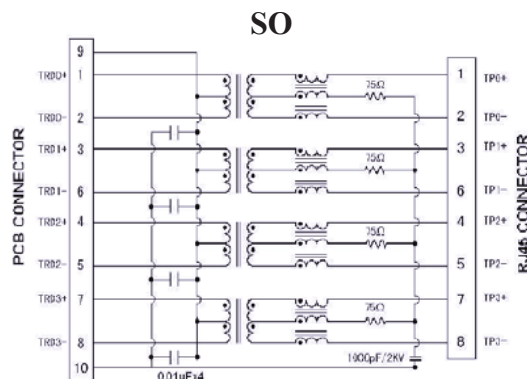
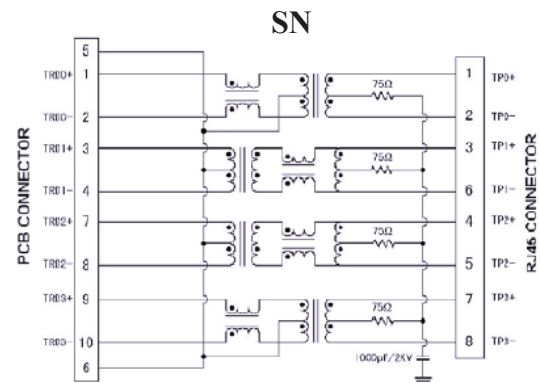
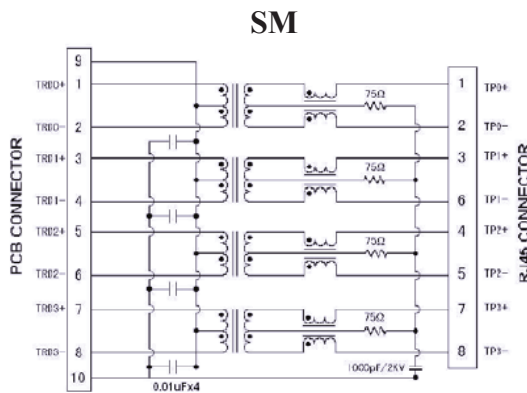
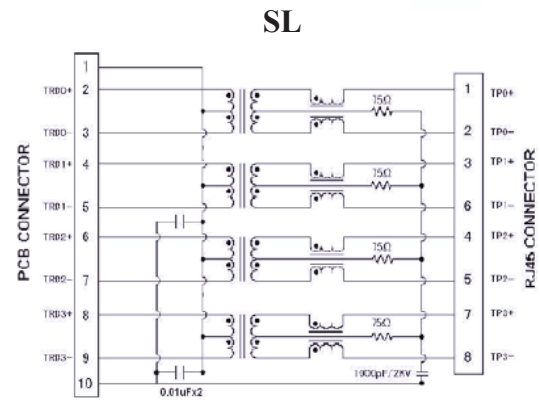
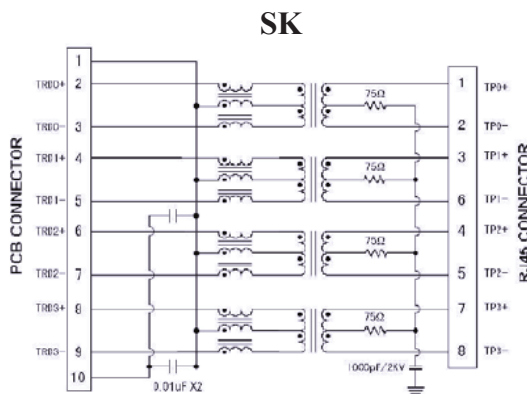
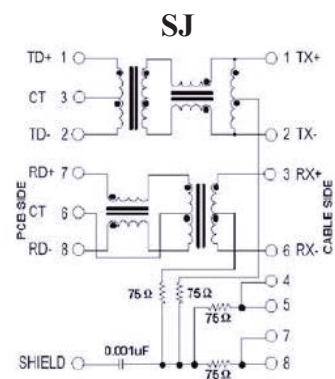
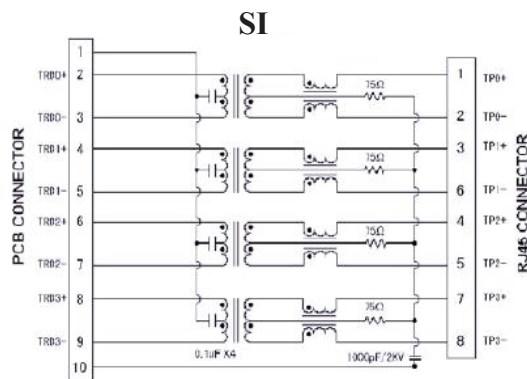
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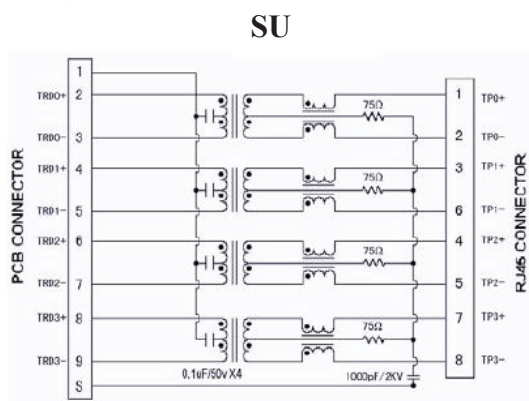
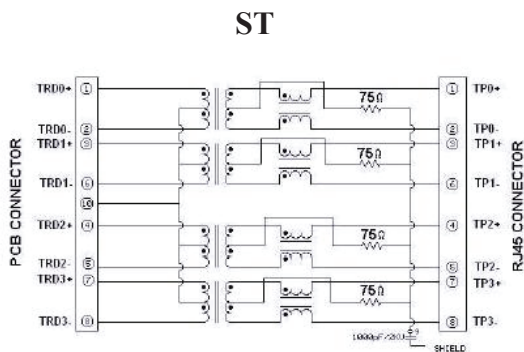
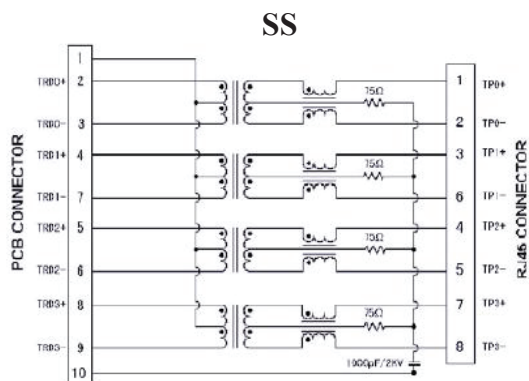
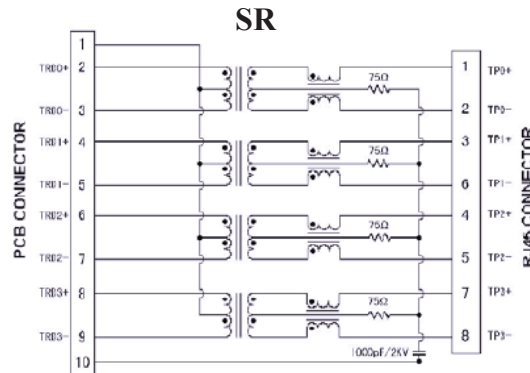
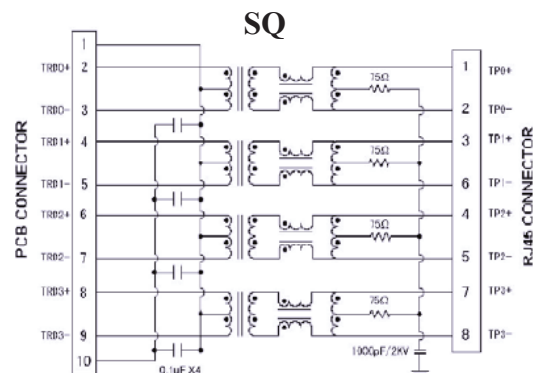
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## SCHEMATICS - continued





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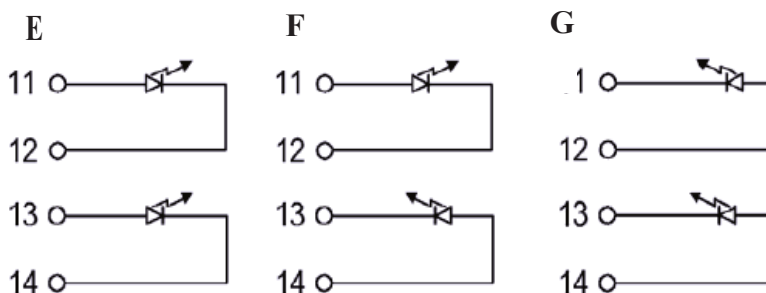
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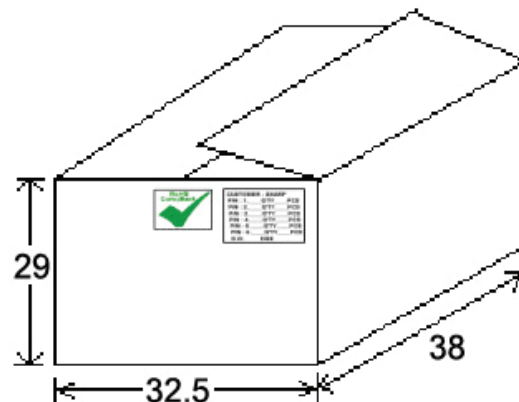
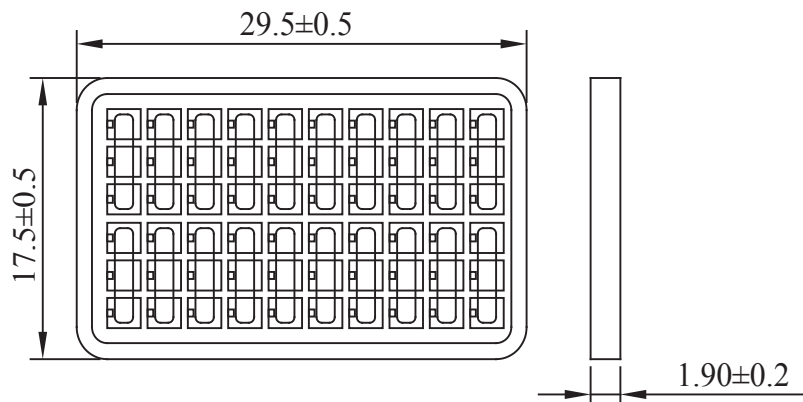
## LED POLARITY



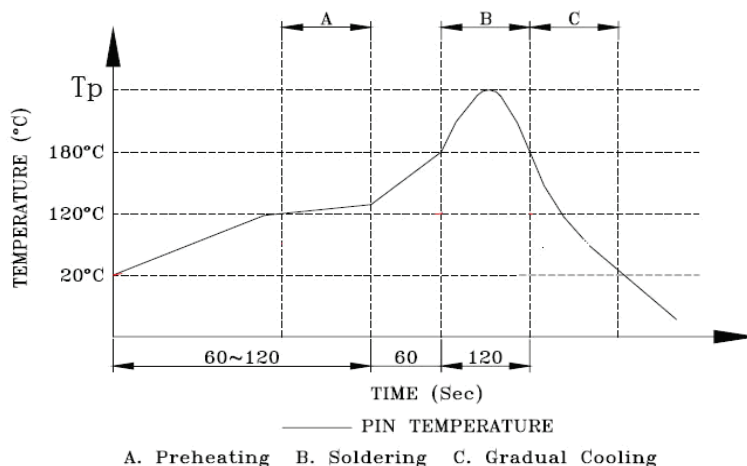
## PACKING: 60pcs/tray

Packaging material: PET

Outer carton unit 1320 pcs/ 22 Trays/box



## REFLOW PROFILE:



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

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