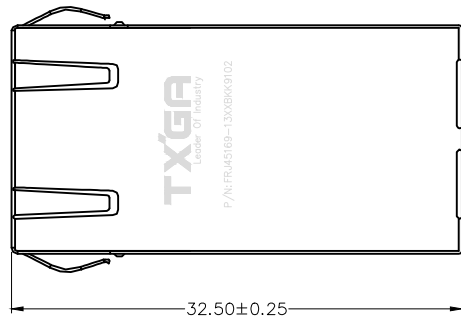


| REV | LOCATIONS | DESCRIPTION | DATE | REVISER | APPD |
|-----|-----------|-------------|------|---------|------|
| | | | | | |

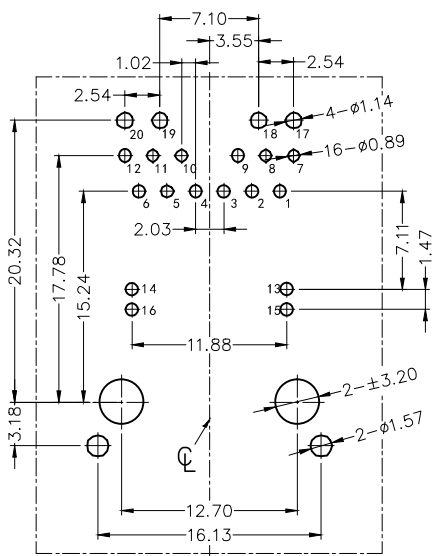
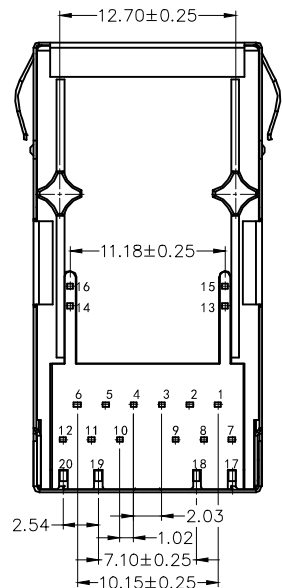
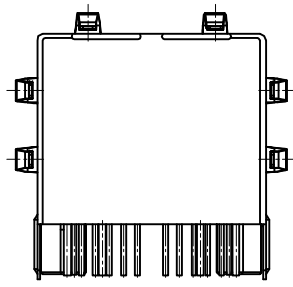
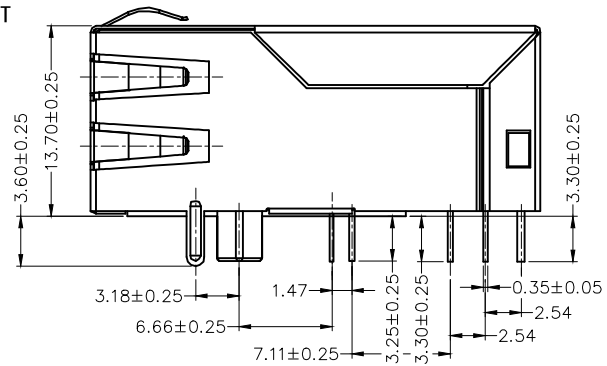
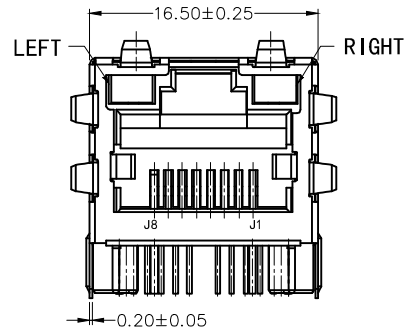


SPECIFICATIONS

Electrical
 Current Rating: 1.5A AC(rms)/DC
 Voltage Rating: 125V AC(rms)/DC
 Contact Resistance: 40 mΩ Max
 Insulation Resistance: 500 MΩ Min / DC 500V
 Withstanding Voltage: 1000V AC r.m.s
 Operating Temperature: -40°C~+85°C

Mechanical
 Durability: 750 cycles Min.
 Insertion force: 23 N Max.

Material and plating
 Housing: PBT (UL 94V-0), Black
 Contact: Phosphor Bronze/ Selective gold on contact area and bright tin on tails area
 Shell: Brass/ Nickel plated



Recommended P.C.Board Layout
 Tolerances: ±0.05

Ordering Information

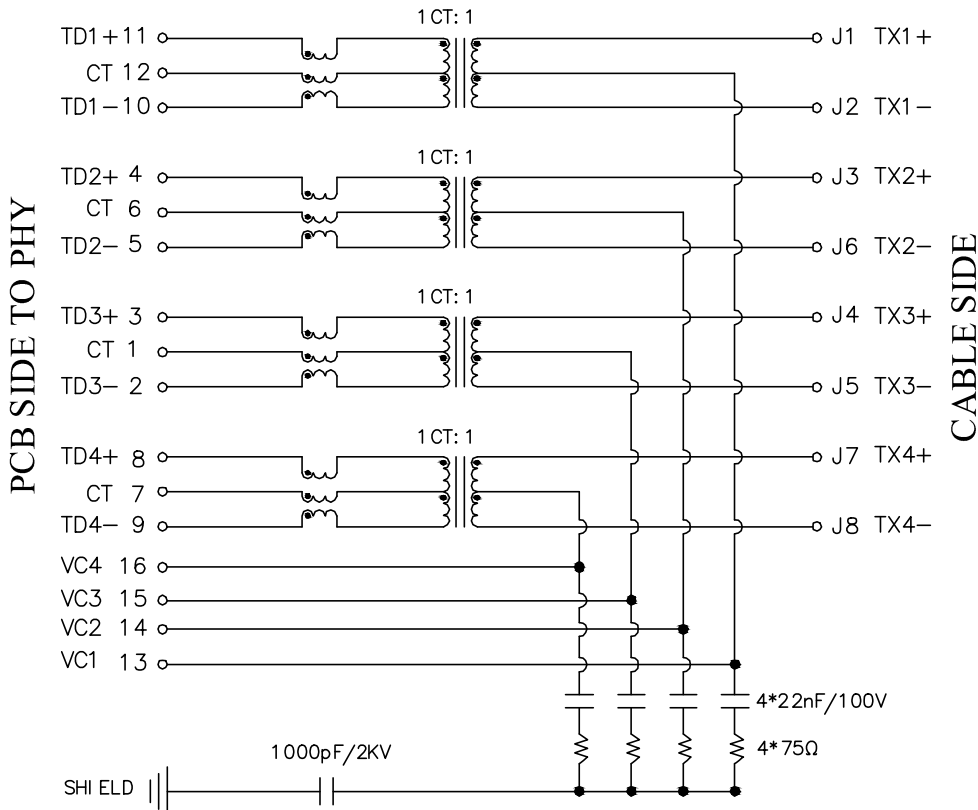
FRJ45 169 - 1 3 XX BK K 9 1 0 2
 1 2 3 4 5 6 7 8 9 10

| | | | | |
|------------------------------------|--------------------------|-----------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1 Category FRJ45-RJ45 Connector | 2 Distinction No. 169 | 3 Ports options 1-1 Port | 4 Plating 3-Selective gold on contact area, bright tin on tail | 5 Thickness of plating 00-Gold flash 06-6μ" Custom plate available |
| 6 Color-Resin BK-Black | 7 Packaging K-Tray | 8 LED style 9-L: Green+Yellow R: Green+Yellow | 9 Contact type 1-Square pin | 10 Pin circuits 2-1000Base-T |

| | | | | | | | |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------------------|
| <p>THIRD ANGLE PROJECTION</p> | GENERAL TOLERANCES (UNLESS SPECIFIED) X. ±0.30 X.* ±5° X.X ±0.20 X.X* ±2° X.XX ±0.15 X.XX* ±1° X.XXX ±0.10 X.XXX* ±0.5° | | APPROVE BY FRANK CHECKED BY CHERRY DRAWN BY KATE | DATE 25/JUN/21 DATE 25/JUN/21 DATE 25/JUN/21 | PART NO. FRJ45169-13XXBK9102 TITLE RJ45 Connector 12P8C 90° Angle (1000Base-T) POE+ | ITEM NO. FRJ45169 REV 0 | <p>Leader Of Industry</p> SHEET NO. 1/2 |
| | SCALE 5:1 SIZE A4 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | |

| REV | LOCATIONS | DESCRIPTION | DATE | REVISER | APPD |
|-----|-----------|-------------|------|---------|------|
| | | | | | |

SCHEMATIC

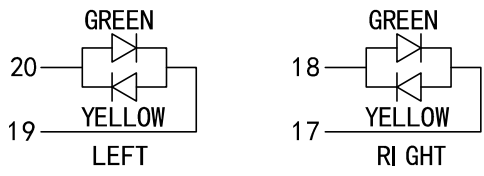


Electrical Specifications

- Turn ratio: 1~10: J1~J2=1CT:1CT(±2%)
4~5: J3~J6=1CT:1CT(±2%)
3~2: J4~J5=1CT:1CT(±2%)
8~9: J7~J8=1CT:1CT(±2%)
- OCL: 350uH Min. @ 100KHz 100mV
RMS (4 Channel) 15mA DC bias
- Insertion Loss: -1.0dB Max @ 1~100MHz
- Return loss: -18dB Min @ 1~30MHz
-14dB Min @ 30~60MHz
-12dB Min @ 60~80MHz
-10dB Min @ 80~100MHz
- Cross talk: -40dB Min @ 1~30MHz
-35dB Min @ 30~60MHz
-30dB Min @ 60~100MHz
- CMR: -30dB Min @ 1~100MHz
- Hi-Pot: 2250V DC 6S 1mA PRI TO SEC
- Single port magnetic jack POE magnetics acc. To IEEE802.3at for PSE or PD applications.
- 100% of production tested to comply with IEEE 802.3 isolation requirements balanced DC line current 720mA max. @57V DC continuous.

LED Specification

| Standard LED Color | LED Wavelength | Foward(A) | Foward(V) |
|--------------------|----------------|-----------|------------|
| Green | 568nm | 20mA | 1.85-2.45V |
| Yellow | 585nm | 20mA | 1.7-2.2V |



| | | | | | | | | |
|----------------------------|---------------------------------------|-------------|----------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------|---------------|
| THIRD ANGLE PROJECTION | GENERAL TOLERANCES (UNLESS SPECIFIED) | | APPROVE BY FRANK | DATE 25/JUN/21 | PART NO. FRJ45169-13XXBKK9102 | ITEM NO. FRJ45169 | Leader Of Industry | |
| | X. ±0.30 | X.* ±5' | CHECKED BY CHERRY | DATE 25/JUN/21 | TITLE RJ45 Connector 12P8C 90° Angle (1000Base-T) POE+ | | | |
| DESIGN UNITS Metric | X.X ±0.20 | X.X' ±2' | DRAWN BY KATE | DATE 25/JUN/21 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | REV 0 | SHEET NO. 2/2 |
| SCALE 5:1 | SIZE A4 | X.XX ±0.15 | X.XX' ±1' | | | | | |
| | | X.XXX ±0.10 | X.XXX' ±0.5' | | | | | |