

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD
1	△	Part No.: Change FRJ4572 into FRJ45058	31/MAY/18	KATE	ERIC
2	△	Size Change	19/Nov/20	CHERRY	ERIC
3	△	structure and size changes	31/MAR/22	MATT	CHERRY

SPECIFICATIONS

Complies With IEEE Standards And All 10/100 Ethernet Specifications Including 350uH With 8mA DC Bias

Electrical Performances

Current Rating: 1.5A AC(rms)/DC
Voltage Rating: 125V AC(rms)/DC
Contact Resistance: 30 mΩ Max
Insulation Resistance: 750 MΩ MIN
Withstanding Voltage: 1000V AC r.m.s

Material and Plating

Housing: Glass Filled Polyester UL 94V-0
Contact: Phosphor Bronze/ Plated Nickel 30u Min, Gold plated On Content Area 6u Min

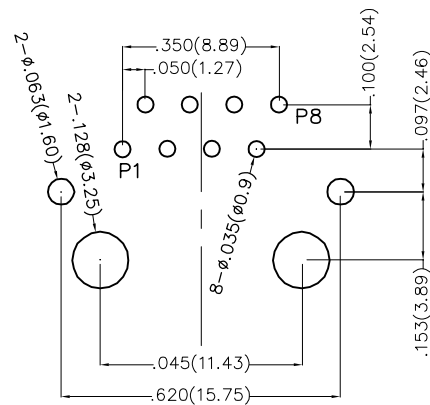
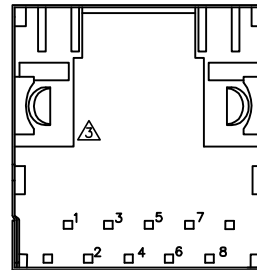
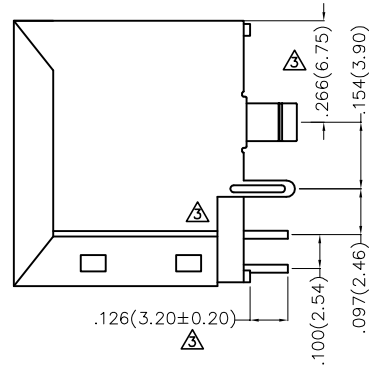
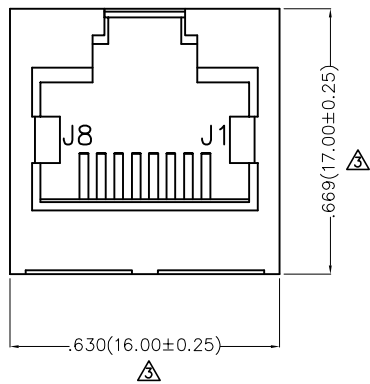
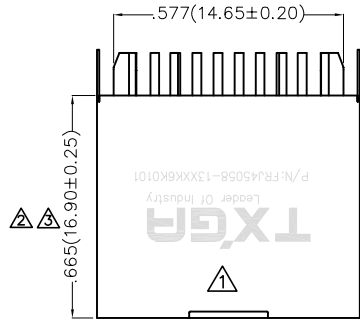
Shell: Copper Alloy/Nickel Plated

Mechanical Performances

Mating/Unmating Force: 30N Max
Retention Strength: 50N For 60s±5s
Durability: 750 Cycles Min.

Environmental Characteristics

Temperature Range-Operating: -40°C~+85°C



Recommended P.C.Board Layout

Ordering Information

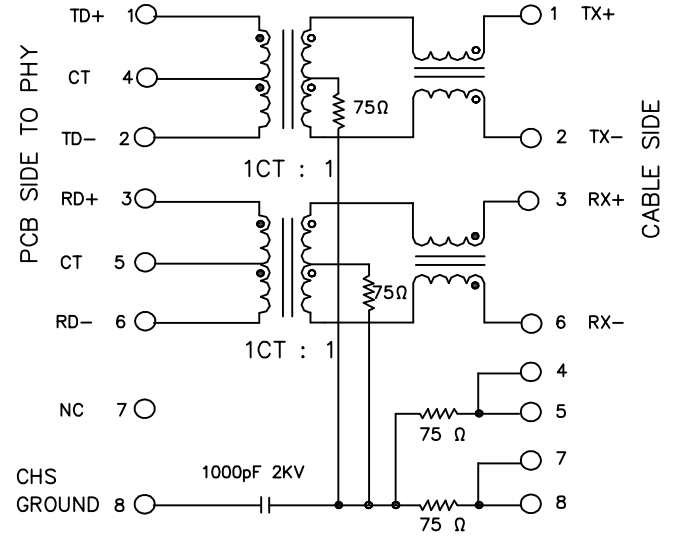
FRJ45 058 — 1 3 XX K6 K 0 1 0 1
1 2 3 4 5 6 7 8 9

1 Category FRJ45-RJ45 Connector	2 Distinction No. 058	3 Ports options 1-1 Port	4 Plating 3-Selective gold in contact area, tin on tail
5 Thickness of plating 00-Gold flash 03-3μ" Custom plate available	6 Color-Resin K6-Black	7 Packaging K-Tray	8 Contact type 1-Square pin
			9 Pin circuits 1-100Base-T

 THIRD ANGLE PROJECTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY FRANK	DATE 1/AUG/13	PART NO. △ FRJ45058-13XXK6K0101	ITEM NO. FRJ45058	 Leader Of Industry
	X.±.012(0.30)	X:±5'	CHECKED BY CHERRY	DATE 1/AUG/13	TITLE RJ45 Connectors 8P8C 180° Vertical (100Base-T)		
DESIGN UNITS Inch (metric)	X.XX±.008(0.20)	.X'±2'	DRAWN BY JACOB	DATE 1/AUG/13	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		REV 3
SCALE 5:1	SIZE A4	X.XX±.006(0.15)					SHEET NO. 1/2
		X.XXX±.004(0.10)					

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD

SCHEMATIC

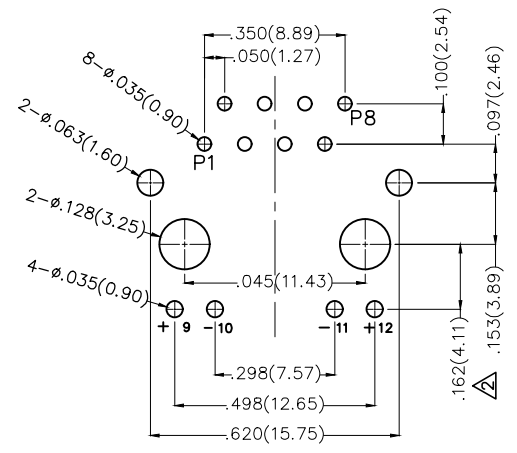
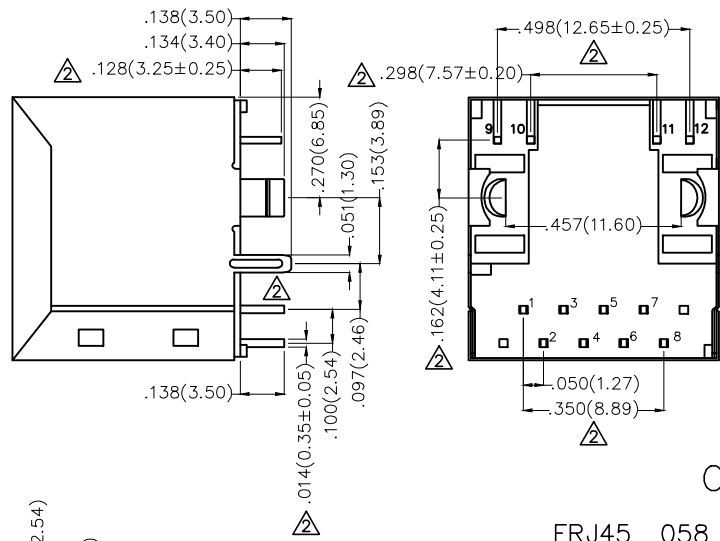
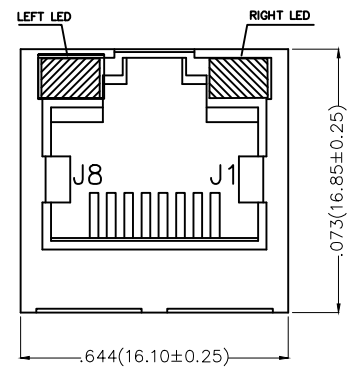
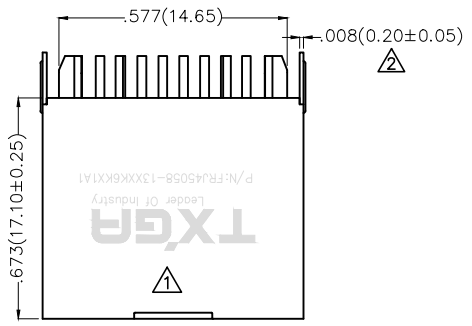


- 1. Turns Ratio:
TX & Rx= 1:1±3%
- 2. Insertion Loss:
0.3~100MHz: -1.0dB Max
- Return Loss:
1~30MHz: -20dB Min
30~60MHz: -15dB Min
60~80MHz: -10dB Min
- Crosstalk: 1~100MHz: -30dB Min
- Common Mode Rejection: 1-100MHz: -30dB Min
- 3. Hipot: 1500V AC 1mA 1S
- 4. Capacitor: 1000PF±20% 2KV
- 5. Resistant of Coil: 1.20HMS Max, 0.350HMS MIN

<p>THIRD ANGLE PROJECTION</p>	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY FRANK	DATE 1/SEPT/13	PART NO. FRJ45058-13XXK6K0101	ITEM NO. FRJ45058	<p>Leader Of Industry</p>	
	X.±.012(0.30)	X.*±5'	CHECKED BY CHERRY	DATE 1/SEPT/13	TITLE RJ45 Connectors 8P8C 180° Vertical (100Base-T)			REV 3
	X.X±.008(0.20)	.X*±2'	DRAWN BY JACOB	DATE 1/SEPT/13	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
	X.XX±.006(0.15)	.XX*±1'						
SCALE 5:1	SIZE A4	X.XXX±.004(0.10)	.XXX*±0.5'					

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD
1	△	1. Add the "TXGA" logo 2. Part No.: Change FRJ4572 into FRJ45058	01/JUN/18	Vandy	Eric
2	△	Change the structure and add dimensions	08/JUL/20	KATE	CHERRY
3	△	LED light correction	08/Jan/25	NICK	LEO

A
B
C
D
E
F



Recommended P.C.Board Layout

SPECIFICATIONS

Complies With IEEE Standards And All 10/100 Ethernet Specifications Including 350uH With 8mA DC Bias

Electrical Performances

- Current Rating: 1.5A AC(rms)/DC
- Voltage Rating: 125V AC(rms)/DC
- Contact Resistance: 30 mΩ Max
- Insulation Resistance: 750 MΩ MIN
- Withstanding Voltage: 1000V AC r.m.s

Material and Plating

- Housing: Glass Filled Polyester UL 94V-0
- Contact: Phosphor Bronze/ Plated Nickel 30u Min, Gold plated On Contact Area 6u Min
- Shell: Copper Alloy/Nickel Plated

Mechanical Performances

- Mating/Unmating Force: 30N Max
- Retention Strength: 50N For 60s±5s
- Durability: 750 Cycles Min.


Environmental Characteristics

Temperature Range-Operating: -40°C~+85°C

Ordering Information

FRJ45 058 — 1 3 XX K6 K X 1 A 1
1 2 3 4 5 6 7 8 9 10 11

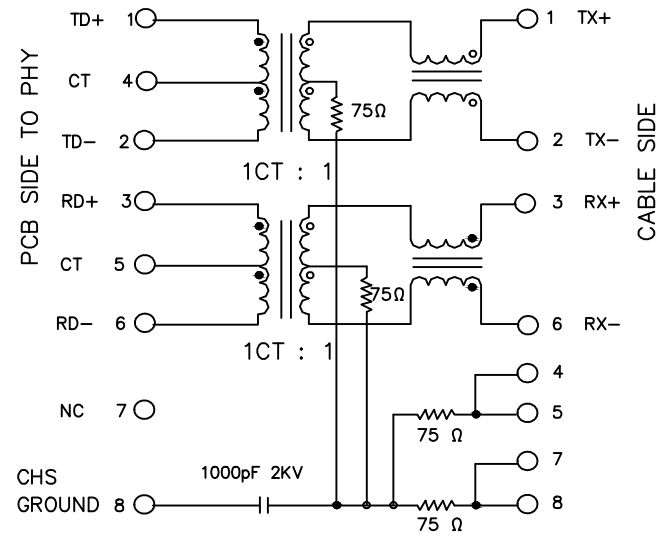
1 Category FRJ45-RJ45 Connector	2 Distinction No. 058	3 Ports options 1-1 Port	4 Plating 3-Selective gold in contact area, tin on tail	5 Thickness of plating 00-Gold flash 03-3μ" Custom plate available
6 Color-Resin K6-Black	7 Packaging K-Tray	8 LED style 1-L: Yellow R:Green 2-L: Green R: Yellow	9 Contact type 1-Square pin	10 distinction type A-With LED
11 Pin circuits 1-100Base-T				

THIRD ANGLE PROJECTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY FRANK	DATE 1/AUG/13	PART NO. △ FRJ45058-13XXK6KX1A1	ITEM NO. FRJ45058	 Leader Of Industry
	DESIGN UNITS Inch (metric)	X.±0.12(0.30) X.X±.008(0.20)	X.'±5' X.'±2'	CHECKED BY CHERRY	DATE 1/AUG/13	TITLE RJ45 Connectors 8P8C 180° Vertical (100Base-T)	
SCALE 5:1	SIZE A4	X.XX±.006(0.15) X.XXX±.004(0.10)	.XX'±1" .XXX'±0.5'	DRAWN BY JACOB	DATE 1/AUG/13	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
						REV 3	SHEET NO. 1/2

F
E
C
D
E
F

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD

SCHEMATIC



Electrical Specifications: (25 °C)

RoHS Compliant (PB Free)

Isolation: 1500Vrms (UTP Side to Chip Side)

OCL: 350uH Minimum @100KHz 100mV with 8mADC

Insertion Loss: -1.0dB Maximum @300KHz ~ 100MHz

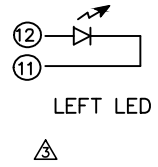
Return Loss: -20dB Minimum @1MHz ~ 10MHz / -16dB Minimum @10MHz ~ 30MHz
 -12dB Minimum @30MHz ~ 60MHz / -10dB Minimum @60MHz ~ 80MHz

Common Mode Rejection: -30dB Minimum @1MHz ~ 50MHz

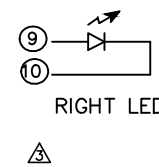
-20dB Minimum @50MHz ~ 150MHz

Crosstalk: -40dB Typical @1MHz ~ 30MHz / -35dB Typical @30MHz ~ 60MHz

-30dB Typical @60MHz ~ 100MHz



LEFT LED



RIGHT LED

 THIRD ANGLE PROJECTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY FRANK	DATE 1/SEPT/13	PART NO. FRJ45058-13XXK6KX1A1	ITEM NO. FRJ45058	 Leader Of Industry	
	DESIGN UNITS Inch (metric)	X.±.012(0.30) X.X±.008(0.20)	X.'±5' .X'±2'	CHECKED BY CHERRY	DATE 1/SEPT/13	TITLE RJ45 Connectors 8P8C 180° Vertical (100Base-T)		REV 3
	SCALE 5:1	X.XX±.006(0.15) X.XXX±.004(0.10)	.XX'±1' .XXX'±0.5'	DRAWN BY JACOB	DATE 1/SEPT/13	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
	SIZE A4							