

1 2 3 4 5 6 7 8

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD

SPECIFICATION

Electrical Performance

Current Rating:1.5A AC(rms)/DC

Voltage Rating:125V AC(rms)/DC

Contact Resistance: 20mΩ Max

Insulation Resistance: 500MΩ MIN

Withstanding Voltage:1500V AC r.m.s

Temperature Range—Operating: -40℃~+85℃

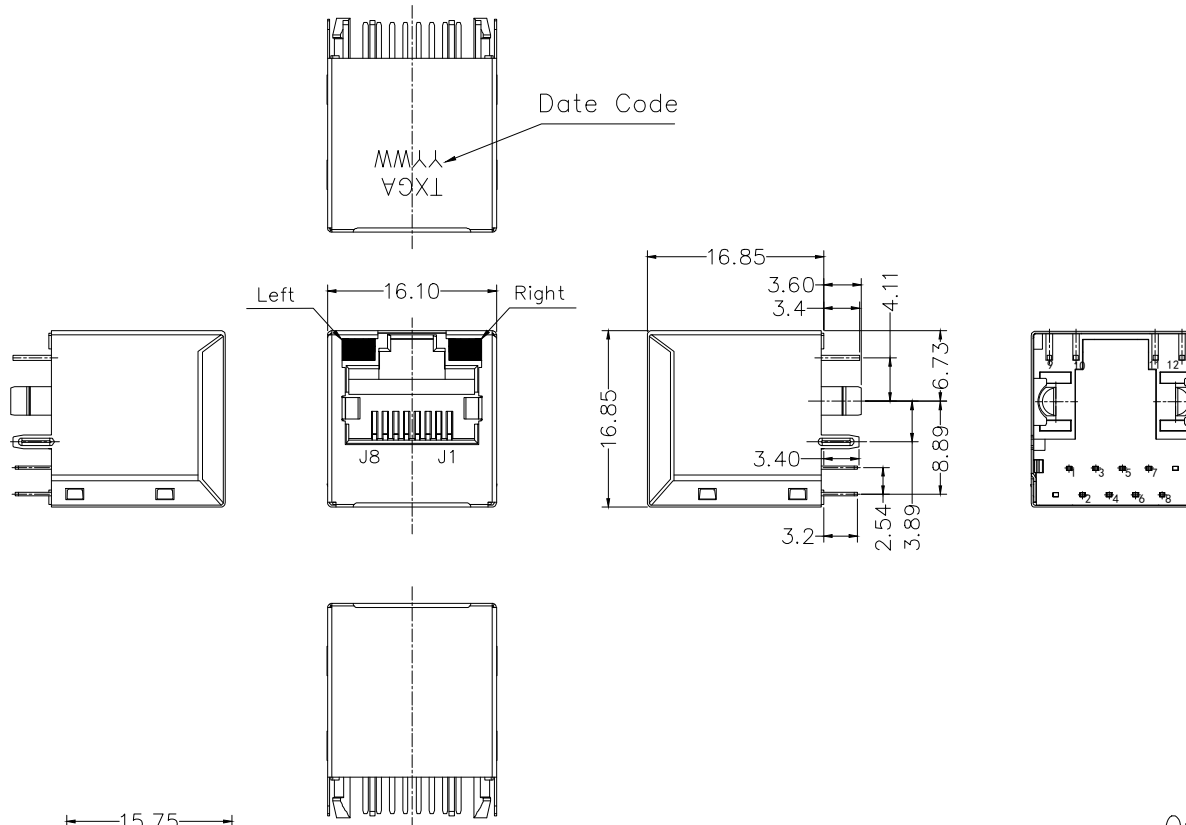
Material and Plating

Housing:PBT, (UL 94V-0)

Terminals Bracket:PBT, (UL 94V-0)

Terminal:Phosphor bronze/Selective gold plated on contact area and matte tin plated on tails area

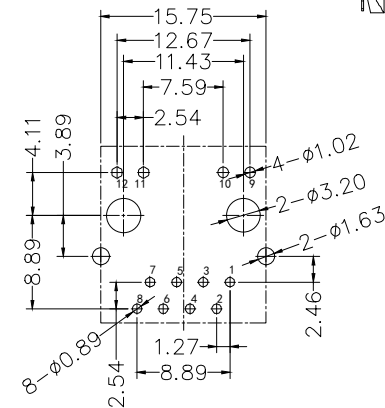
Shield: Copper alloy/Nickel plating



Ordering Information

FRJ45 254 — 1 7 XX BK K X 1 0 1
1 2 3 4 5 6 7 8 9 10

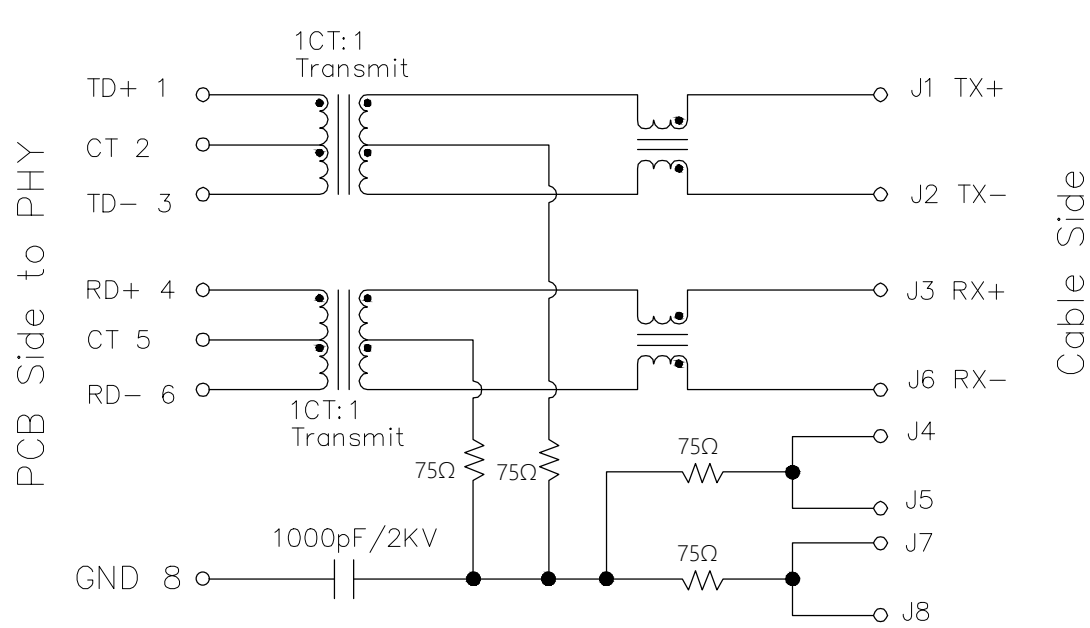
1	Category FRJ45-RJ45 Connector	2	Distinction No. 254	3	Ports options 1-1 Ports	4	Plating 7-Selective gold plated on contact area and matte tin plated on tails area	5	thickness of Gold Plating 06-6u"
6	Color-Resin BK-Black	7	Packaging K-Tray	8	LED style 1-L: Yellow R: Green 2-L: Green R: Yellow	9	Contact type 1-Square pin	10	Pin circuits 1-100Base-T



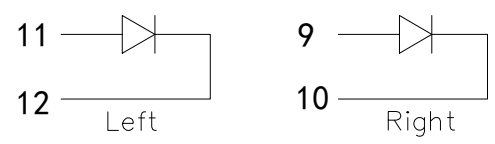
Recommended P.C.Board Layout
General tolerances:±0.05

 THIRD ANGLE PROJECTION		GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY LEO	DATE 19/Sept/23	PART NO. FRJ45254-17XXBKKX101	ITEM NO. FRJ45254	 Building Technology Cornerstone	
		X. ±0.30	X.* ±5°	CHECKED BY	DATE	TITLE RJ45 Connector 8P8C Vertical(180°)(100Base-T)			
DESIGN UNITS METRIC(mm)		X.X ±0.20	X.X* ±2°	GISELLE	19/Sept/23				
		X.XX ±0.15	X.XX* ±1°	DRAWN BY	DATE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
SCALE 5:1	SIZE A4	X.XXX ±0.10	X.XXX* ±0.5°	HJP	19/Sept/23				

1 2 3 4 5 6 7 8



Electrical;
Turn ratio: 1~3: J1~J2=1CT:1CT(±2%).
4~6: J3~J6=1CT:1CT(±2%).
OCL: 350uH Min.at 100KHz 100mV 8mA DC.
Insertion Loss: -1.0 dB Max 1~100MHz.
Return loss: -20dB Min 1~10MHz;
-16dB Min 10~30MHz.
-12dB Min 30~60MHz.
-10dB Min 60~80MHz.
Cross talk: -40dB Min 1~30MHz;
-35dB Min 30~60MHz;
-30dB Min 60~100MHz;
CMR: -30dB Min 1~100MHz;
Hi-Pot: 1500V AC&2250V DC 6S 1mA PRI TO SEC



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

DESIGN UNITS
METRIC(mm)

SCALE
5:1

SIZE
A4

GENERAL TOLERANCES
(UNLESS SPECIFIED)

X. ±0.30

X.X ±0.20

X.XX ±0.15

X.XXX ±0.10

X.* ±5°

X.X* ±2°

X.XX* ±1°

X.XXX* ±0.5°

APPROVE BY
LEO

CHECKED BY
GISELLE

DRAWN BY
Hejianpeng

DATE
19/Sept/23

DATE
19/Sept/23

DATE
19/Sept/23

PART NO.
FRJ45254-17XXBKX101

TITLE
RJ45 Connector 8P8C
Vertical(180°)(100Base-T)

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ITEM NO.
FRJ45254

REV 0

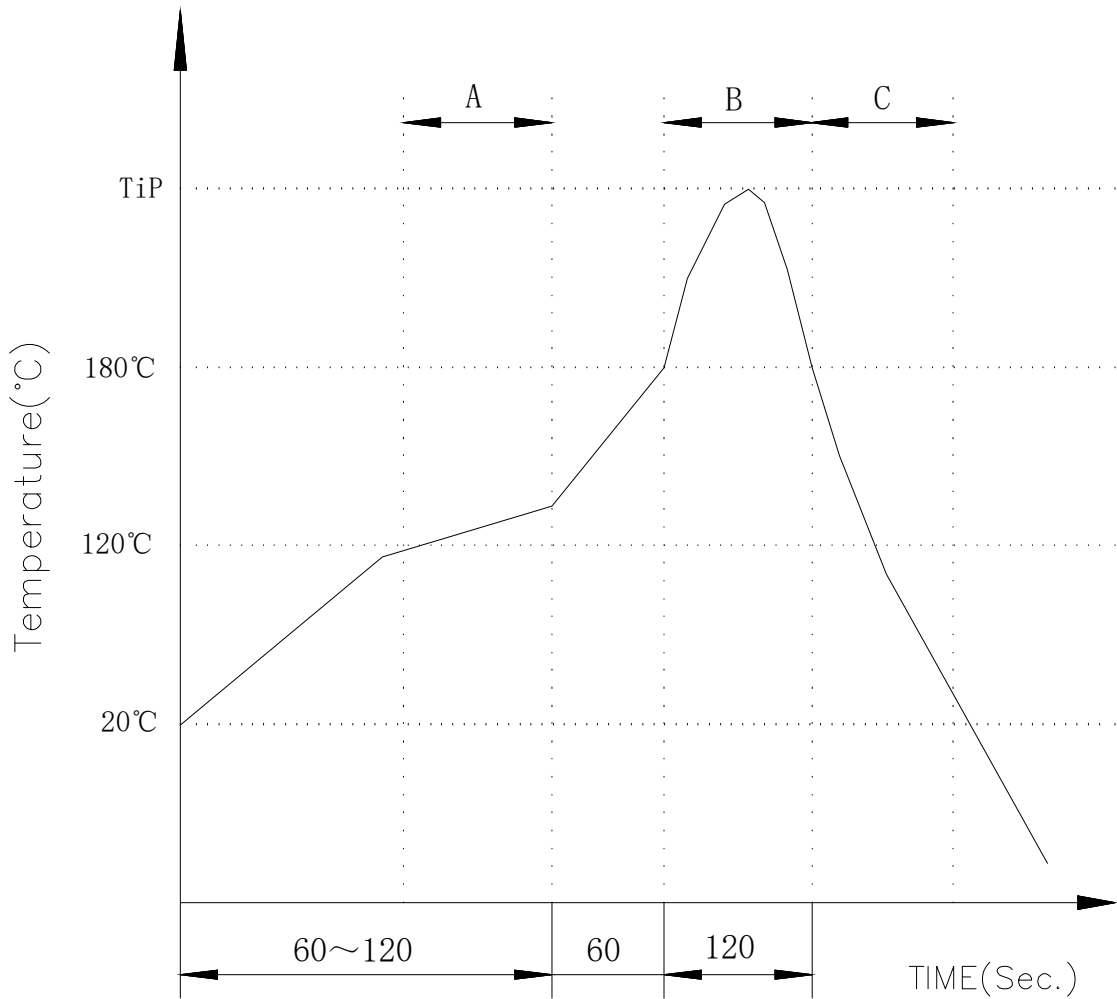
SHEET NO. 2/3

TXGA

Building Technology Cornerstone

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD

PROFILE OF WAVE SOLDER



A.Preheating B.Soldering C.Gradual Cooling
Tip temperature: 260±5°C.
Tip temperature time: 5Sec Max.
Tip melting point of Sn96.5/Ag3/Cu0.5: 217°C.

Remarks: after wave soldering, the plastic positioning columns of the product which under the PCB will be slightly melted, but it won't affect its function.

 THIRD ANGLE PROJECTION		GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY	DATE	PART NO.	ITEM NO.	 Building Technology Cornerstone	
				LEO	19/Sept/23	FRJ45254-17XXBKKX101	FRJ45254		
DESIGN UNITS METRIC(mm)		X. ±0.30	X.* ±5°	CHECKED BY	DATE	TITLE RJ45 Connector 8P8C Vertical(180°)(100Base-T)		REV 0 SHEET NO. 3/3	
		X.X ±0.20	X.X* ±2°	GISELLE 19/Sept/23					
SCALE SIZE 5:1 A4		X.XX ±0.15	X.XX* ±1°	DRAWN BY	DATE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
		X.XXX ±0.10	X.XXX* ±0.5°	Hejianpeng 19/Sept/23					