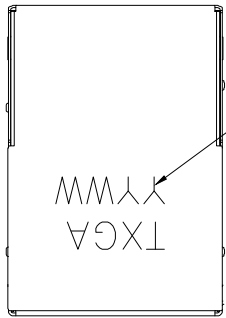


1 2 3 4 5 6 7 8

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD



Date Code

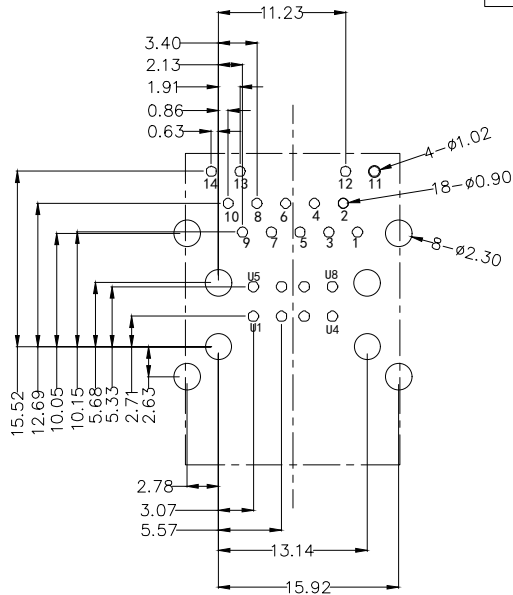
**SPECIFICATION**

**Electrical Performance**

Current Rating: 1.5A AC(rms)/DC  
 Voltage Rating: 125V AC(rms)/DC  
 Contact Resistance: 30mΩ Max  
 Insulation Resistance: 500MΩ MIN  
 Withstanding Voltage: 1000V AC r.m.s  
 Temperature Range—Operating: -40°C~+85°C

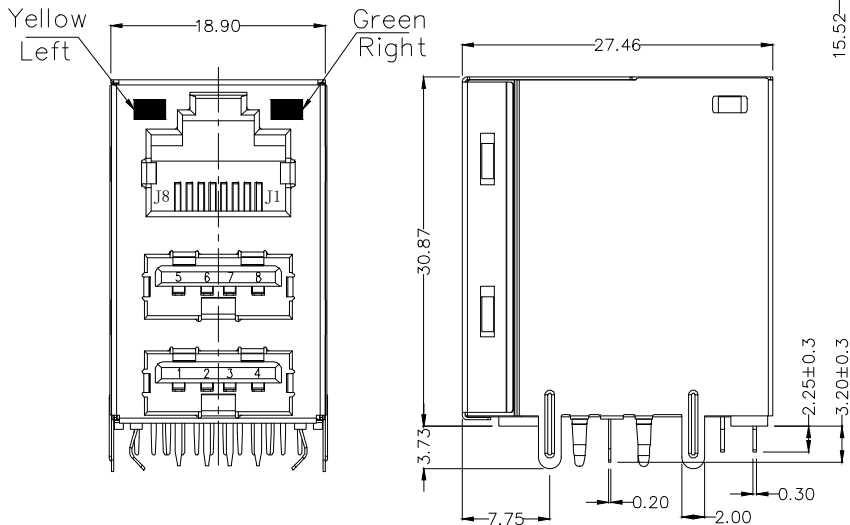
**Material and Plating**

Housing: PBT, (UL 94V-0) Black(RJ45)  
 PBT, (UL 94V-0) Black(USB2.0)  
 Terminals Bracket: PBT, (UL 94V-0) Black  
 Terminal: Copper alloy/Selective gold plated on contact area and matte tin plated on tails area(RJ45)  
 Copper alloy/6u" Gold Plating on contact area(USB2.0)  
 Shield: SUS



Recommended P.C.Board Layout

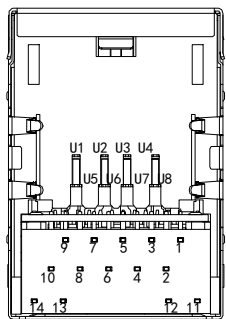
General tolerances: ±0.05



**Ordering Information**

FRJ45 238 — 1 7 XX BK K 1 1 0 2  
 1 2 3 4 5 6 7 8 9 10

1   Category FRJ45-RJ45 Connector	2   Distinction No. 238	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	9   Contact type 1-Square pin	10   Pin circuits 2-1000Base-T

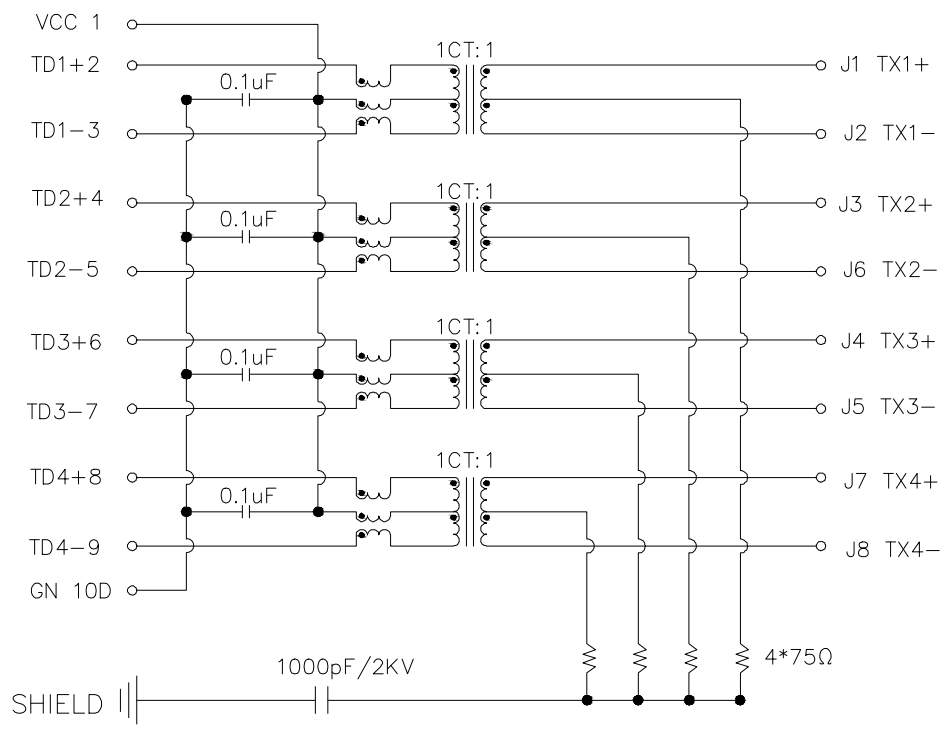


<p>THIRD ANGLE PROJECTION</p>	<p>GENERAL TOLERANCES (UNLESS SPECIFIED)</p>		<p>APPROVE BY LEO</p>	<p>DATE 19/Sept/23</p>	<p>PART NO. FRJ45238-17XXBKK1102</p>	<p>ITEM NO. FRJ45238</p>	<p>Building Technology Cornerstone</p>
	<p>X. ±0.30</p>	<p>X.' ±5°</p>	<p>CHECKED BY GISELLE</p>	<p>DATE 19/Sept/23</p>	<p>TITLE RJ45+USB2.0 Connector 10P8C Angle(90°)(1000Base-T)</p>		
<p>DESIGN UNITS METRIC(mm)</p>	<p>X.X ±0.20</p>	<p>X.X' ±2°</p>	<p>DRAWN BY Hejianpeng</p>	<p>DATE 19/Sept/23</p>	<p>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</p>		
<p>SCALE 5:1</p>	<p>SIZE A4</p>	<p>X.XX ±0.15</p>	<p>X.XX' ±1°</p>	<p>X.XXX ±0.10</p>	<p>X.XXX' ±0.5°</p>		

1 2 3 4 5 6 7 8

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD

PCB Side to PHY

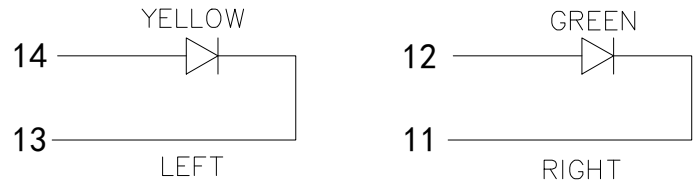


Cable Side

Electrical;  
 Turn ratio: 2~3: J1~J2=1CT:1CT(±2%).  
 4~5: J3~J6=1CT:1CT(±2%).  
 6~7: J4~J5=1CT:1CT(±2%).  
 8~9: J7~J8=1CT:1CT(±2%).  
 OCL: 350uH Min.at 100KHz 100mV 8mA DC.  
 Insertion Loss: -1.0 dB Max 1~100MHz.  
 -1.2 dB Max 100~125MHz.  
 Return loss: -16dB Min 1~40MHz;  
 -12dB Min 40~60MHz.  
 -10dB Min 60~80MHz.  
 -8dB Min 80~100MHz.  
 Cross talk: -30dB Min 1~100MHz;  
 CMR: -30dB Min 1~100MHz;  
 Hi-Pot: 2250V DC 6S 1mA PRI TO SEC

LED Specification

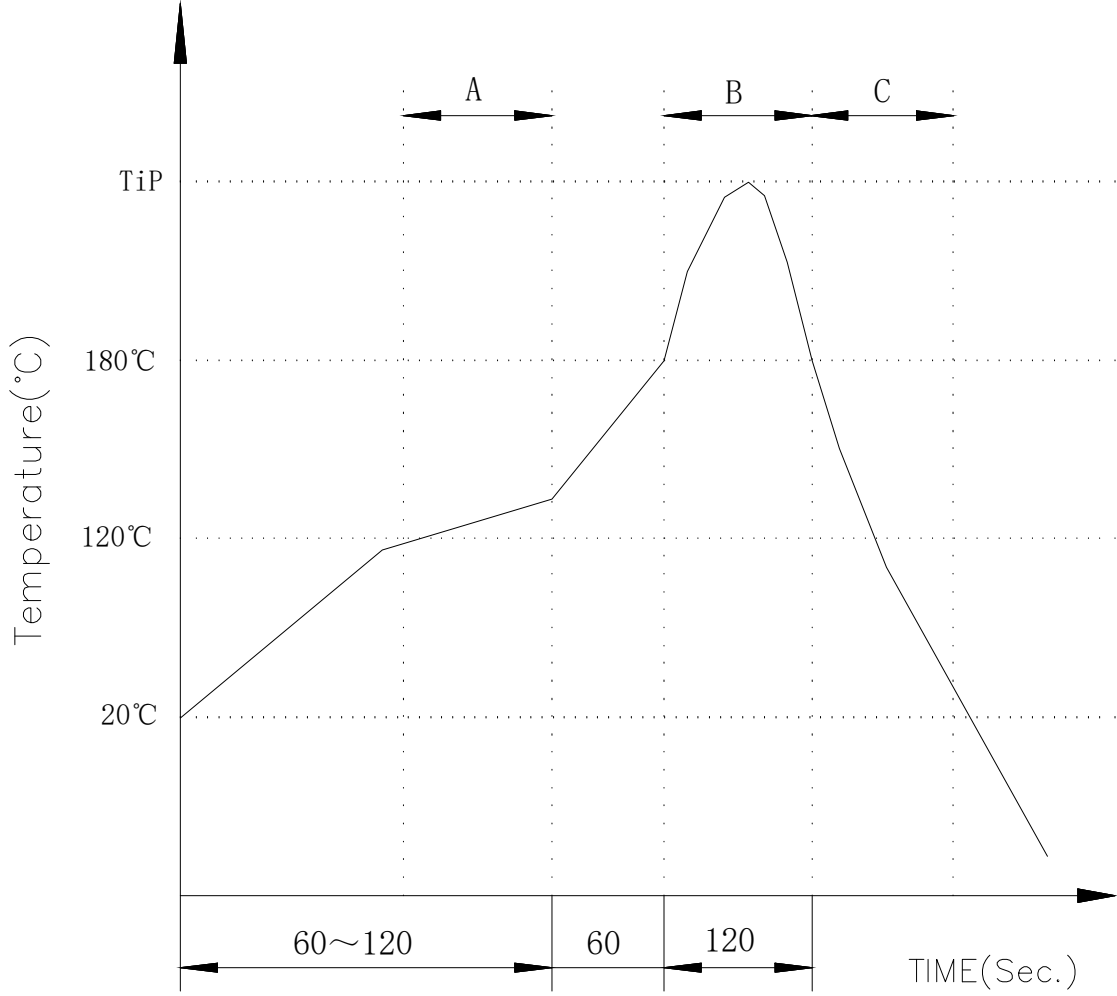
Standard LED Color	LED Wavelength	Foward(A)	Foward(V)
Green	565nm	20mA	2.2-2.4V
Yellow	590nm	20mA	2.1-2.5V



<p>THIRD ANGLE PROJECTION</p>	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY LEO	DATE 19/Sept/23	PART NO. FRJ45238-17XXBKK1102	ITEM NO. FRJ45238	<p>Building Technology Cornerstone</p>	
	X. ±0.30	X.* ±5°	CHECKED BY GISELLE	DATE 19/Sept/23	TITLE RJ45+USB2.0 Connector 10P8C Angle(90°)(1000Base-T)			REV 0
	DESIGN UNITS METRIC(mm)	X.X ±0.20	X.X* ±2°	DRAWN BY Hejianpeng	DATE 19/Sept/23	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.XX ±0.15	X.XX* ±1°					
		X.XXX ±0.10	X.XXX* ±0.5°					

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.

<p>THIRD ANGLE PROJECTION</p>	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY LEO	DATE 19/Sept/23	PART NO. FRJ45238-17XXBKK1102	ITEM NO. FRJ45238	<p>Building Technology Cornerstone</p>	
	X. ±0.30	X.* ±5°	CHECKED BY GISELLE	DATE 19/Sept/23	TITLE RJ45+USB2.0 Connector 10P8C Angle(90°)(1000Base-T)			REV 0
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SCALE 5:1	SIZE A4	X.XX ±0.15	X.XX* ±1°					
		X.XXX ±0.10	X.XXX* ±0.5°					