



Part Number

**GSP1X-188S7-QQ-G/Y**

Part Number Builder

GSP1X	-	1	88	S7	QQ	G/Y
Series		No. of Port	No. of Positions/Contacts	Shield Option	Options	LED Color Option

**Series**

GSP1X - RJ45 Modular Jack with Gigabit magnetics over USB, LEDs

**Number of Port**

1 - 1 Port

**Number of Positions / Contacts**

88 - 8 Positions / 8 Contacts

**Shield Options**

S7 - Fully Shielded

**Magnetics Package**

QQ - Gigabit

**LED Color**

G/Y - Green/Yellow

See Next Page for Schematics

**MODULAR JACKS AND PLUGS:**

**GSP1X Series**

RJ45 Modular Jack with Gigabit magnetics over USB, LEDs

**Product Features**

- Stacked RJ45 and USB to reduce PCB footprint
- Includes magnetics to support 1000 Base-T applications
- LEDs for status indicators
- Shielded for EMI suppression

**Performance Specifications**

**Materials and Finish**

**Housing Material**

PBT, UL 94V-0 Rated, Color: Black

**Terminals Bracket**

PBT, UL 94V-0 Rated, Color: Black

**Shield**

C2680, Nickel Plated

**Contact Material**

Phosphor Bronze

**Plating**

- RJ45: 6µ" Gold Plating on Mating Area
- USB: 1µ" Gold Plating on Mating Area

**Electrical Characteristics**

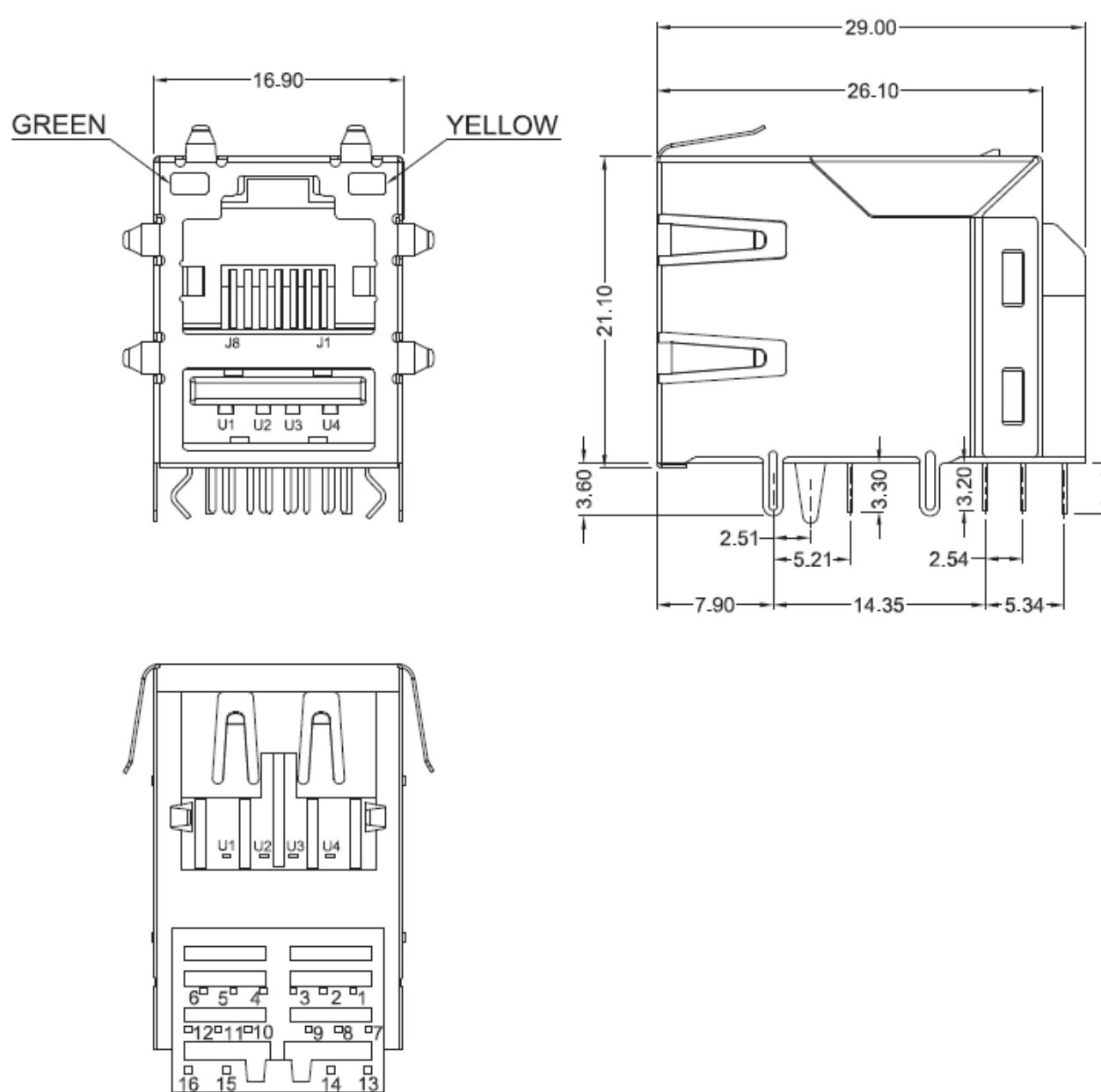
- Rated Current:** 1.5A
- Rated Voltage:** 125V DC
- Insulation Resistance**  
500 Megohms Min.
- Contact Resistance**  
20 milliohms Max.
- Dielectric Withstanding Voltage**  
500V AC for 1 Minute

**Mechanical Characteristics**

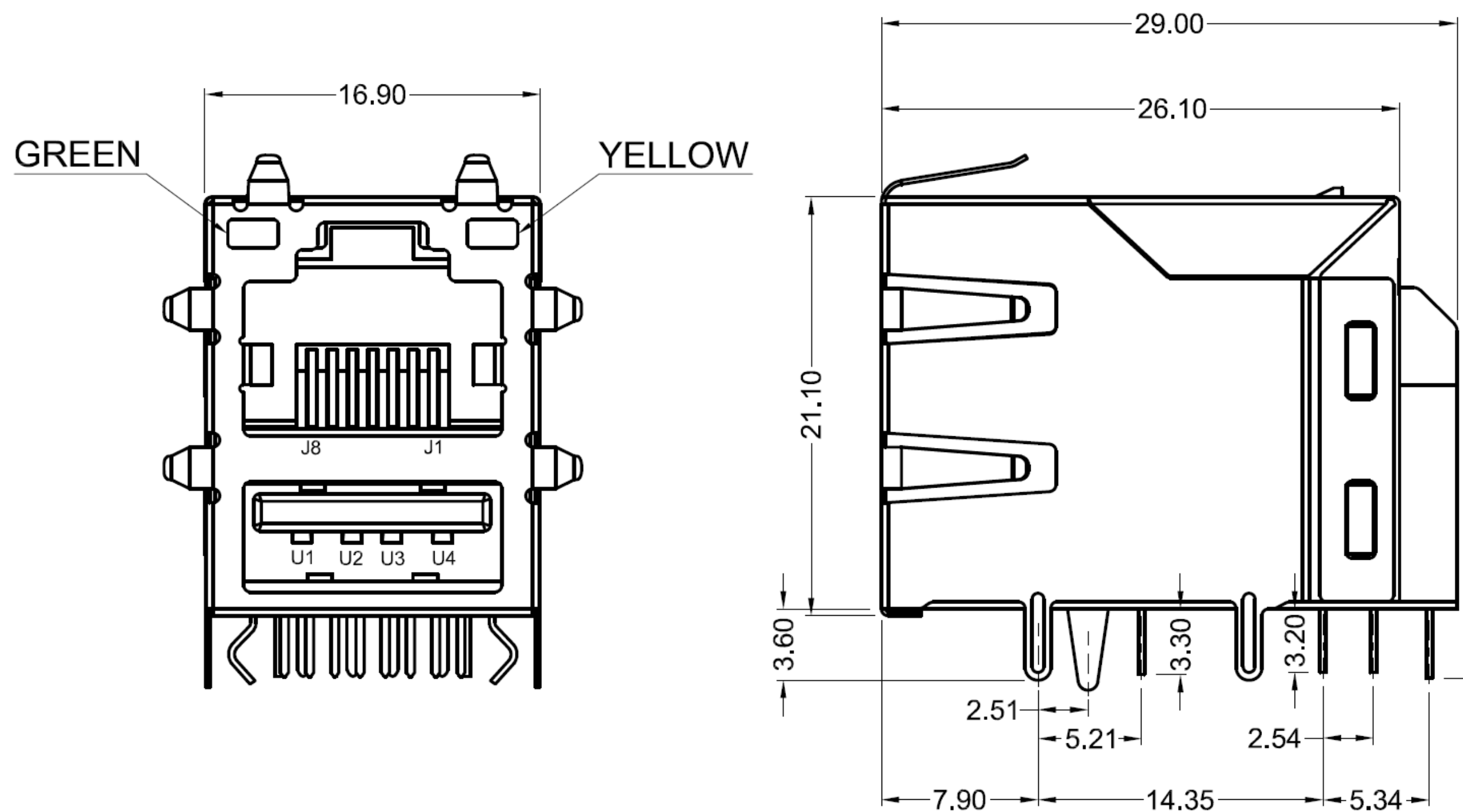
- Durability Rating**  
750 Mating Cycles Min.
- Mating Force**  
30 N Max.
- Operating Temperature**  
-40°C to +85°C
- Storage Temperature**  
-40°C to +85°C

**GSP1X Series**

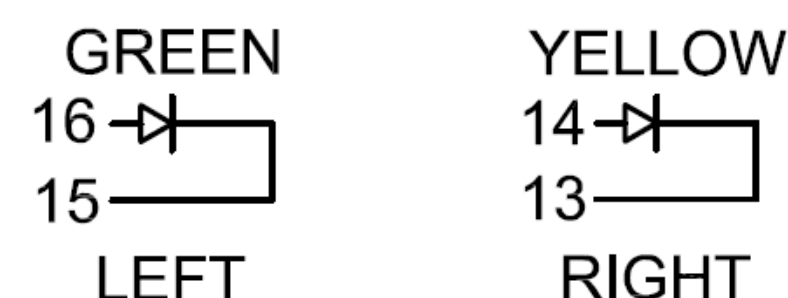
Dimensions in mm







**LED Schematics:**



**Materials and Finish**

Housing: PBT  
 UL 94V-0 Rated  
 Color: Black

Terminals Bracket: PBT  
 UL 94V-0 Rated  
 Color: Black

Shield: C2680, Nickel Plated

Contact Material: Phosphor Bronze

Plating:  
 RJ45: 6u" Gold Plating on Mating Area  
 USB: 1u" Gold Plating on Mating Area

**Electrical Characteristics**

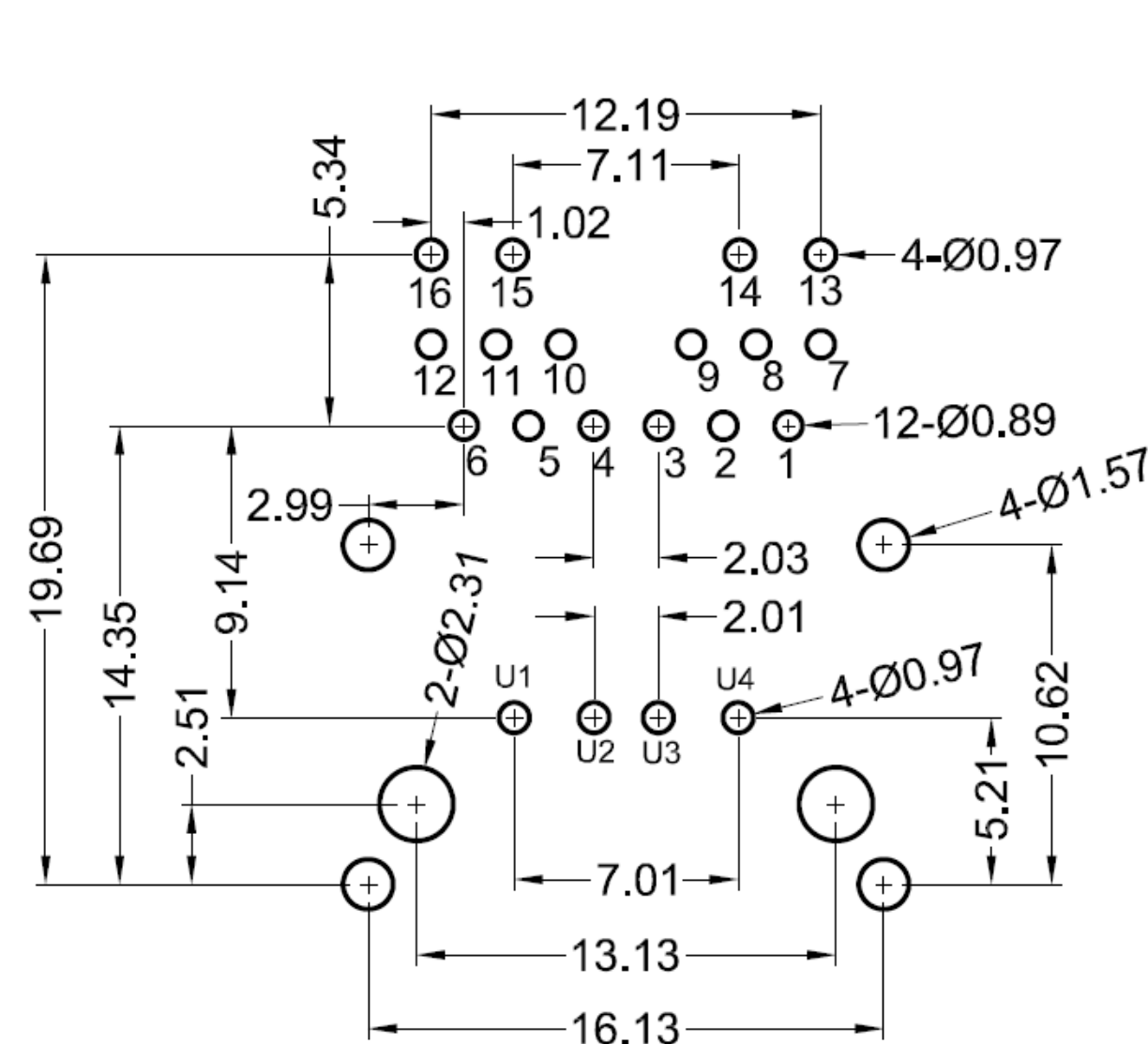
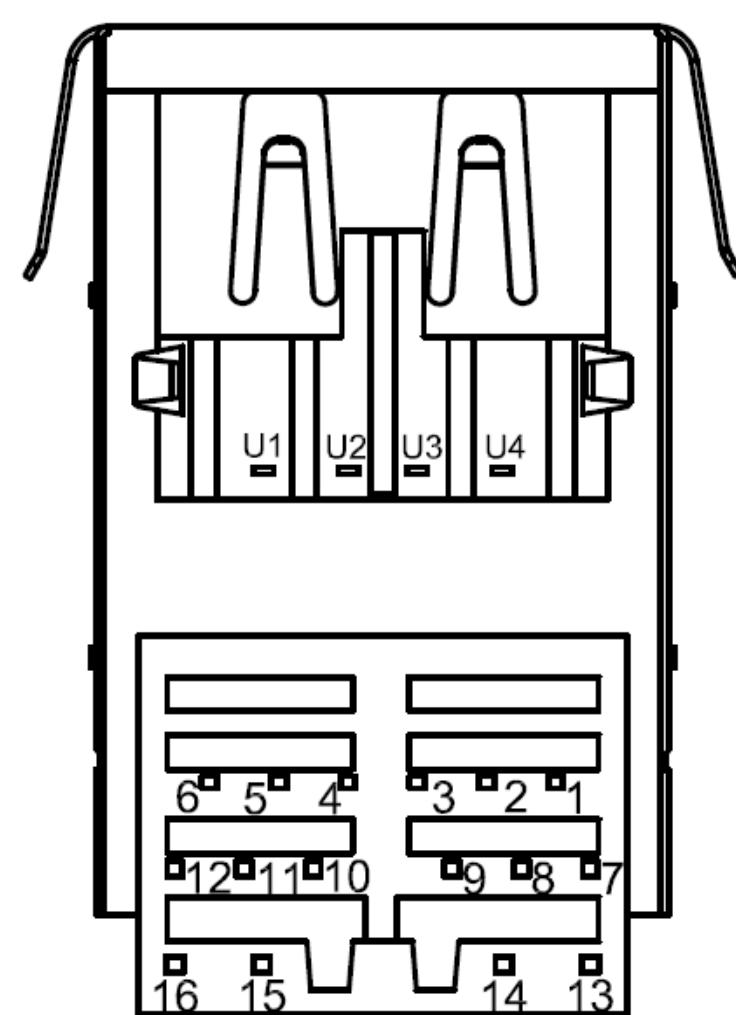
Rated Current: 1.5A  
 Rated Voltage: 125V DC  
 Insulation Resistance:  
 500 Megohms Min.

Contact Resistance:  
 20 milliohms Max.

Dielectric Withstanding Voltage:  
 500V AC for 1 Minute

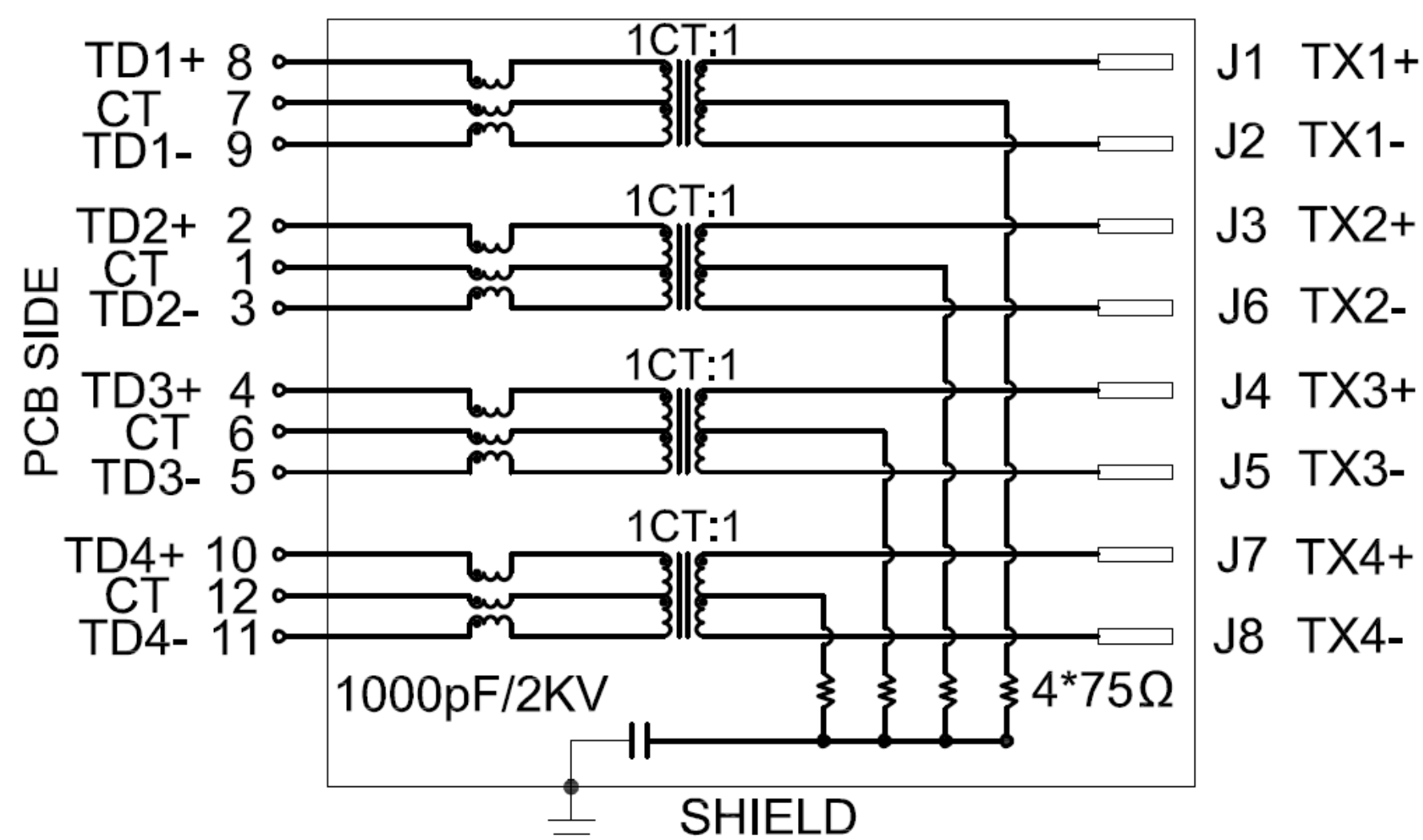
**Mechanical Characteristics**

Durability Rating: 750 Cycles Min.  
 Mating Force: 30 N Max.  
 Operating Temperature: -40°C to +85°C  
 Storage Temperature: -40°C to +85°C



Recommended PCB Layout  
(Top View)

**Magnetics Schematics:**



**Electrical Properties:**

Insertion Loss (dB Max)	Return Loss (dB Min)				Cross Talk (dB Min)			CMR (dB Min)
	1~10MHz	10~30MHz	30~60MHz	60~80MHz	1~30MHz	30~60MHz	60~100MHz	
1~100MHz	-20	-16	-12	-10	-40	-35	-30	1~100MHz
-1.0	-20	-16	-12	-10	-40	-35	-30	-35

**LED Characteristics**

LED Color	LED Wavelength (units: nm)	Forward Current (units: mA)	Forward Voltage (units: V)
Green	568	20	1.8-2.8
Yellow	585	20	1.8-2.8

**Tolerances**  
 X.X ± 0.30  
 X.XX ± 0.25  
 Unless Stated  
 Otherwise



REV.	DATE	DESCRIPTION	REV. BY	CHK. BY	DRAWN BY	DATE
A0	04/25/18	New Drawing	J. Elbanna	C. Kelleher	J. Elbanna	04/25/18
A1	11/14/18	Release Drawing DC18-012	D. Shehan	G. Serrato	J. Elbanna	04/25/18

**GSP1X-188S7-QQ-G/Y**

RJ45 over USB Type A, Magnetics

Tab Up, LEDs, Shielded

