

MODEL: CRJ013-ML1-TH | **DESCRIPTION:** MODULAR JACK

FEATURES

- 8P10C (RJ45)
- integrated magnetics
- 10/100/1000 BaseT
- LED
- shielded

**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
rated voltage				150	Vac
rated current				1.5	A
withstanding voltage	for 1 minute		1,500		Vac
contact resistance				40	mΩ
insulation resistance		500			MΩ
insertion/withdrawal force				6.12	kgf
operating temperature		0		70	°C
storage temperature		-40		85	°C
life			1,000		cycles
flammability rating	UL94V-0				
RoHS	yes				
packaging	carton size: 400 x 303 x 258 mm tray QTY: 120 pcs per tray carton QTY: 1,200 pcs per carton				

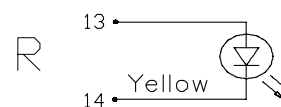
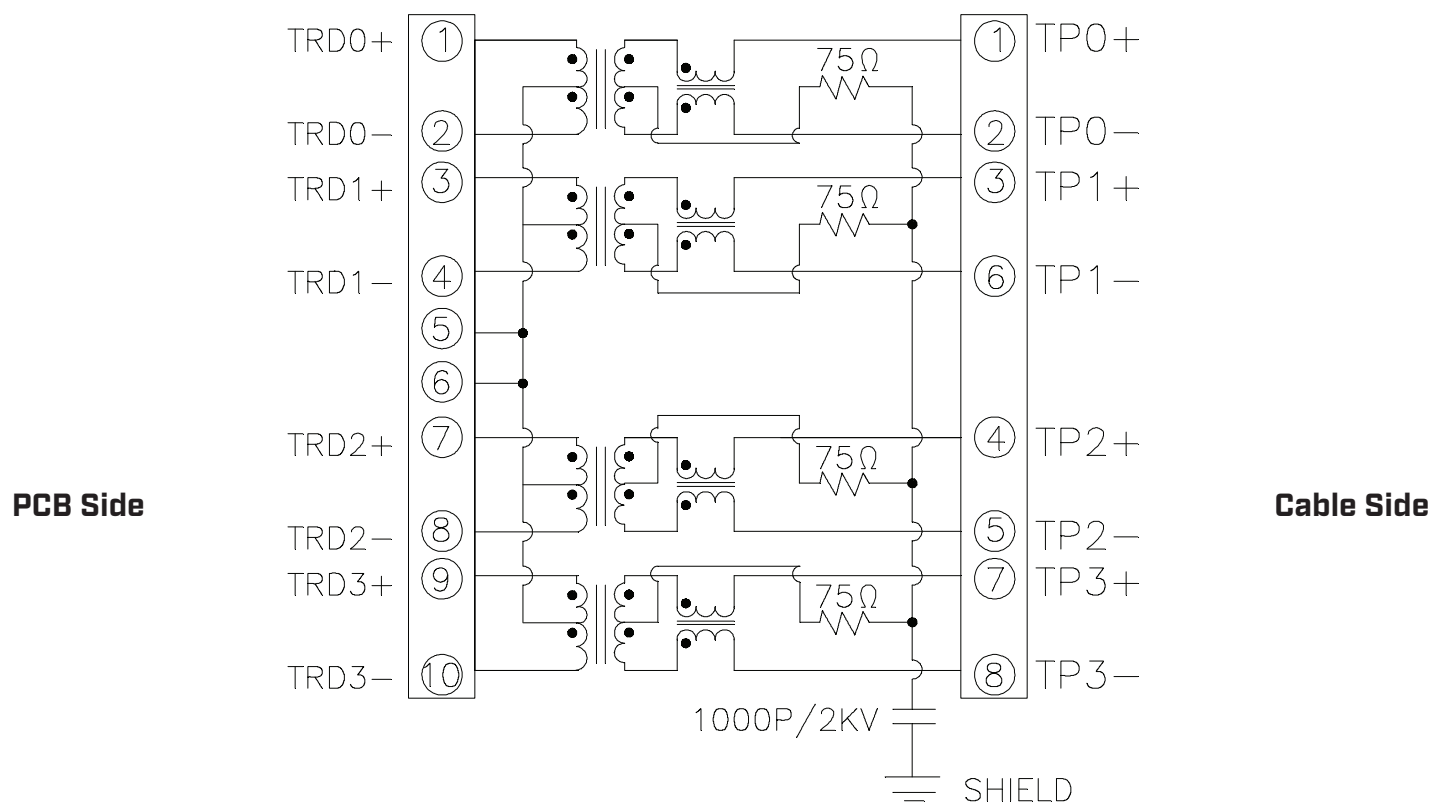
SOLDERABILITY

parameter	conditions/description	min	typ	max	units
wave soldering	for maximum 5 seconds			240	°C

MAGNETIC SPECIFICATIONS (AT 25°C)

parameter	conditions/description	min	typ	max	units
turns ratio	at 100 kHz, 0.1 V P1-P2 : J1-J2 = 1:1 [±5%] P3-P4 : J3-J6 = 1:1 [±5%] P7-P8 : J4-J5 = 1:1 [±5%] P9-P10 : J7-J8 = 1:1 [±5%]				
OCL	at 100 kHz, 0.1 V, 8 mA DC	350			μH
insertion loss	at 1.0~100 MHz at 100~125 MHz			-1.0 -1.2	dB dB
return loss	at 1~30 MHz at 30~60 MHz at 60~80 MHz at 80~100 MHz	-18 -16 -12 -10			dB dB dB dB
crosstalk	at 1~100 MHz	-30			dB
common mode rejection	at 1~100 MHz	-30			dB
hipot	input to output for 1 minute, 1 mA	1,500			Vac

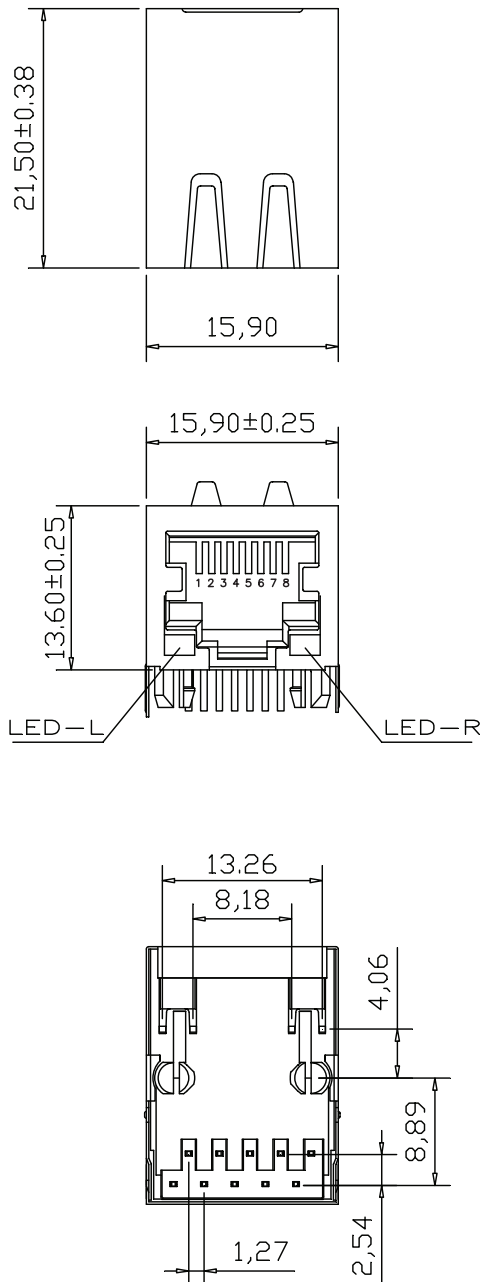
SCHEMATIC



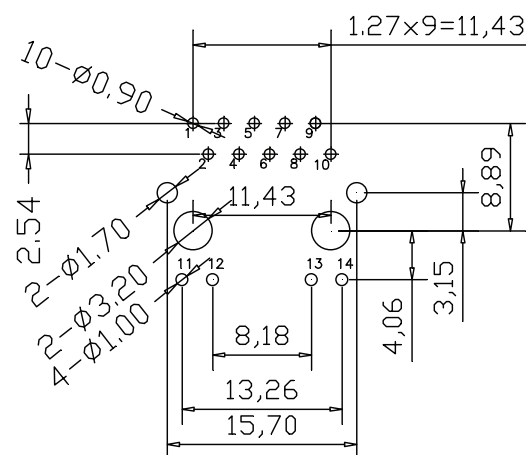
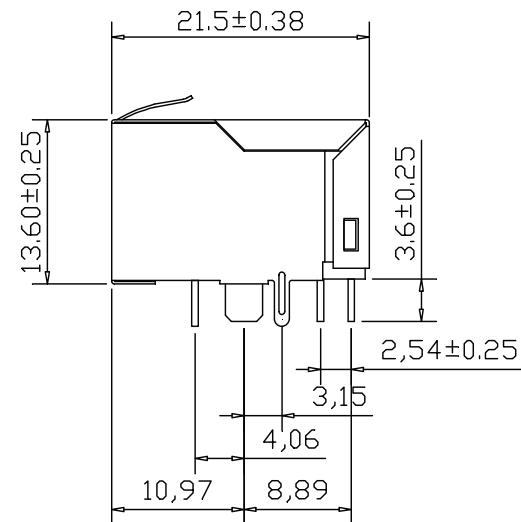
LED COLOR	WAVELENGTH	FORWARD VOLTAGE at IF 20 mA
Green	565~575 nm	2.5 V max
Yellow	585~595 nm	2.5 V max

MECHANICAL DRAWING

units: mm
tolerance:
X ± 0.5 mm
X.X ± 0.38 mm
X.XX ± 0.25 mm
X.XXX ± 0.10 mm
PCB: ± 0.05 mm
PCB thickness: 1.6 mm
unless otherwise noted



ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
1	insulator	PBT (UL94V-0)	black
2	contact terminals	phosphor bronze	contact area: 6 μ " gold over nickel solder area: tin over nickel
3	shield	brass	nickel alloy



Recommended PCB Layout
Top View

REVISION HISTORY

rev.	description	date
1.0	initial release	03/29/2021
1.01	logo, datasheet style update	08/05/2022

The revision history provided is for informational purposes only and is believed to be accurate.



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