

**MODEL:** CRJ007-MLG-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 |       | 80   | °C     |
| life                       |                                                                                                   |     | 1,000 |      | cycles |
| flammability rating        | UL94V-0                                                                                           |     |       |      |        |
| RoHS                       | yes                                                                                               |     |       |      |        |
| packaging                  | carton size: 400 x 303 x 258 mm<br>tray QTY: 120 pcs per tray<br>carton QTY: 1,200 pcs per carton |     |       |      |        |

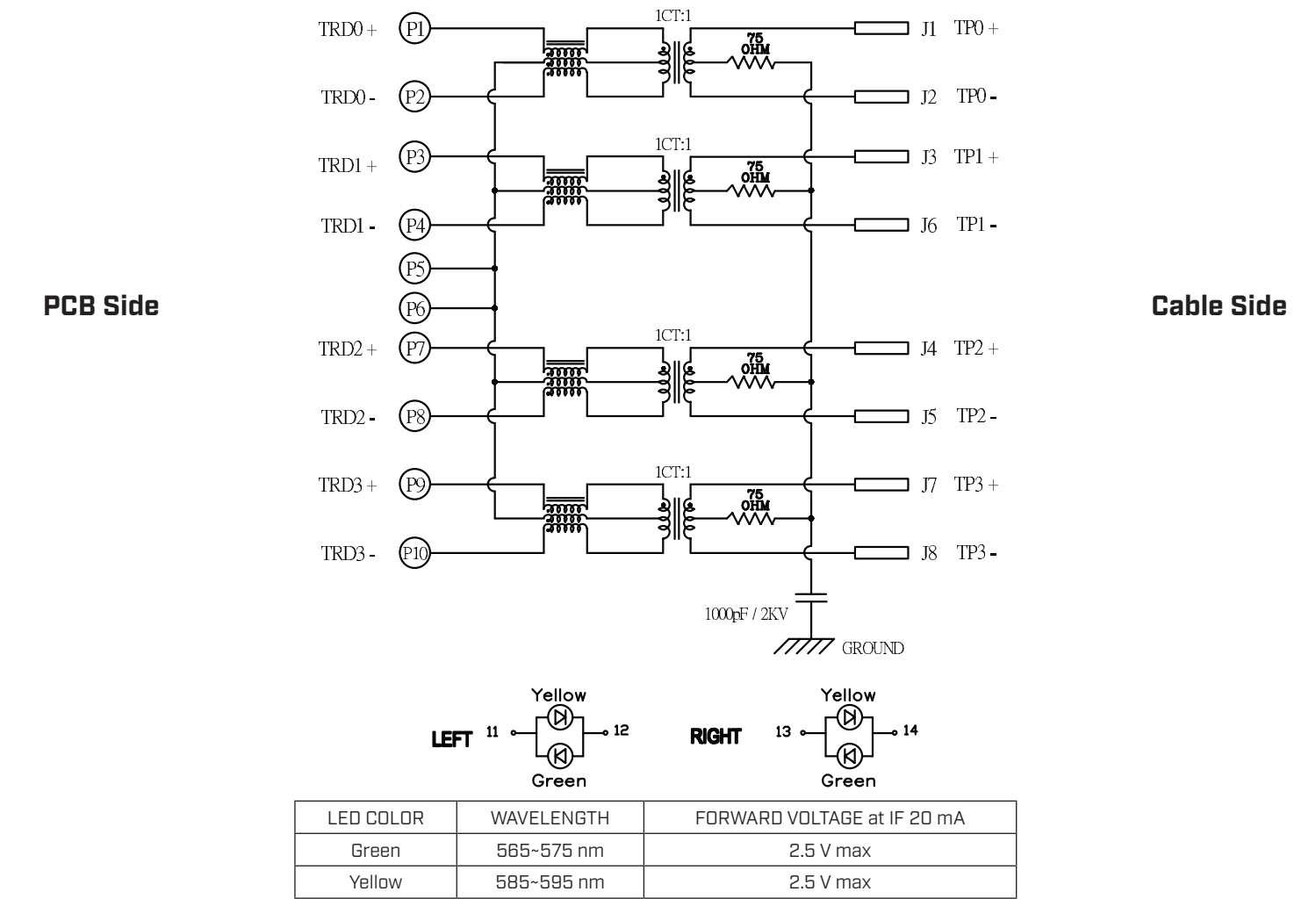
**SOLDERABILITY**

| 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<br>P1-P2 : J1-J2 = 1:1 (±5%)<br>P3-P4 : J3-J6 = 1:1 (±5%)<br>P7-P8 : J4-J5 = 1:1 (±5%)<br>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<br>at 100~125 MHz                                                                                                       |                          |     | -1.0<br>-1.2 | dB<br>dB             |
| return loss           | at 1~30 MHz<br>at 30~60 MHz<br>at 60~80 MHz<br>at 80~100 MHz                                                                           | -18<br>-16<br>-12<br>-10 |     |              | dB<br>dB<br>dB<br>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                  |

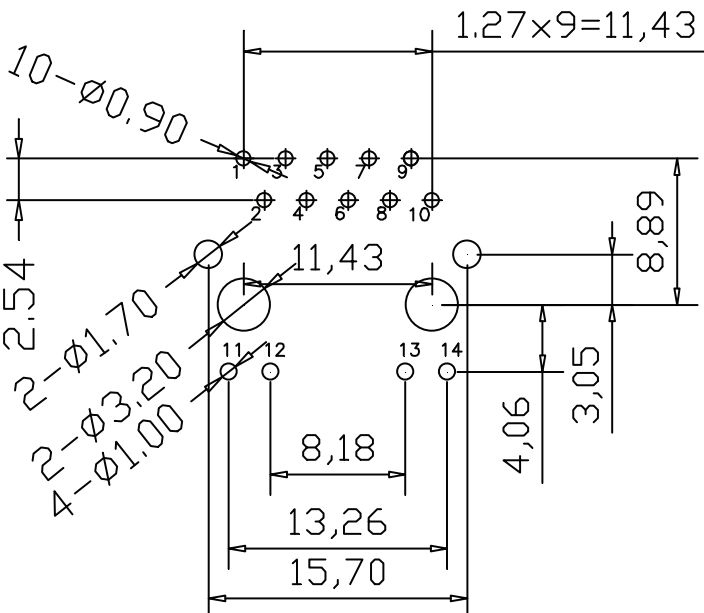
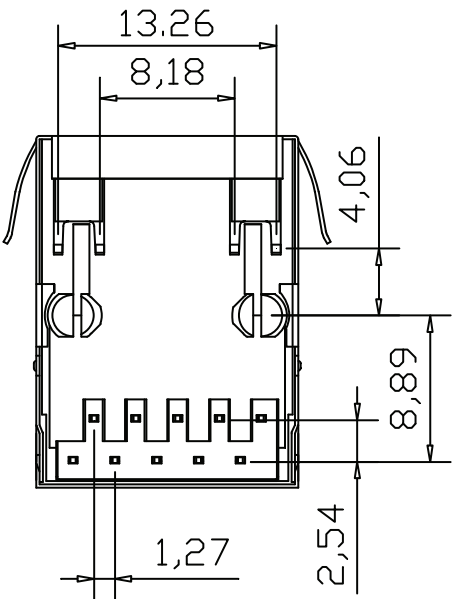
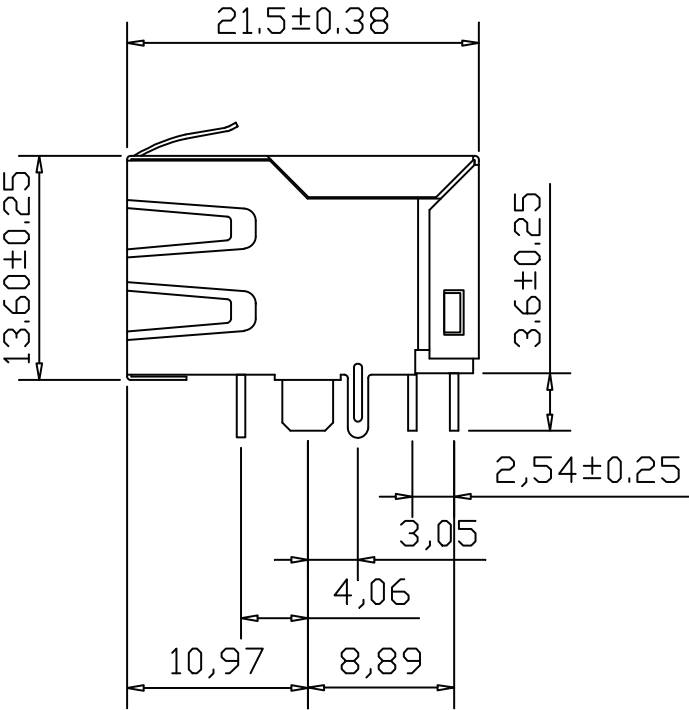
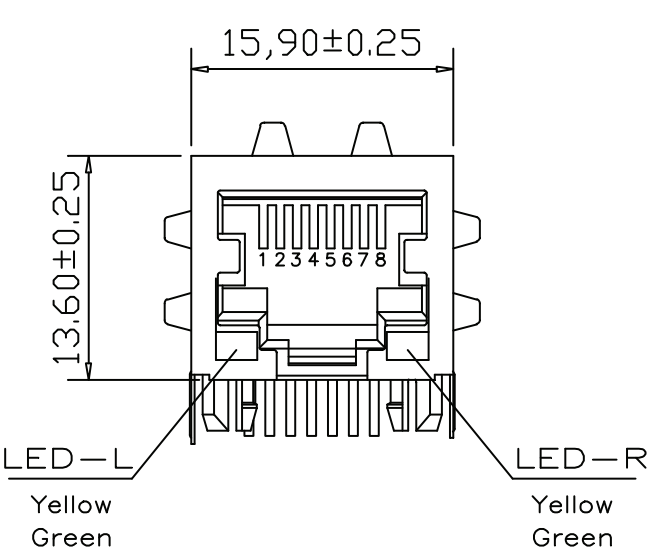
SCHEMATIC



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:gold flash over nickel<br>solder area: tin over nickel |
| 3    | shield            | brass           | nickel alloy                                                        |



Recommended PCB Layout  
Top View

REVISION HISTORY

| rev. | description                       | date       |
|------|-----------------------------------|------------|
| 1.0  | initial release                   | 03/31/2021 |
| 1.01 | logo, datasheet style update      | 08/05/2022 |
| 1.02 | CUI Devices rebranded to Same Sky | 09/12/2024 |

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



Same Sky offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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