

PRO-S28JUS28MX-P5M

Juniper Networks® JNP-SFP-25G-DAC-5M to Mellanox® MCP2M00-A005 Compatible 25GBase-CU SFP28 Direct Attach Cable (Passive Twinax, 5m)

Features

- Up to 25Gbps bi-directional data links
- Hot-pluggable
- Compliant with SFF-8402
- 100 Ohm differential impedance
- Enhanced EMI design
- AC coupled inputs and outputs
- Operating Temperature: 0 to 70 Celsius
- Single power supply 3.3V
- RoHS Compliant and Lead-Free



Applications:

• 25GBase Ethernet

Product Description

This Juniper Networks® JNP-SFP-25G-DAC-5M to Mellanox® MCP2M00-A005 dual oem compatible 25GBase-CU SFP28 to SFP28 passive direct attach cable has a maximum reach of 5.0m (16.4ft). It is 100% Juniper Networks® to Mellanox® compatible and has been programmed, uniquely serialized, data-traffic and application tested to ensure that it is compliant and functional. This cable will initialize and perform identically to Juniper Networks® and Mellanox®'s individual cables and is built to meet or exceed OEM specifications. This product complies with MSA (Multi-Source Agreement) standards and is TAA (Trade Acts Agreement) compliant. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

Proline's transceivers are RoHS compliant and lead-free.

TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to foster fair and open international trade. TAA requires that the U.S. Government may acquire only "U.S. – made or designated country end products.



General Specifications

| Parameter | Symbol | Min. | Тур. | Max. | Unit | Notes |
|-----------------------|--------|------|------|-------|-------|-------|
| Data Rate | DR | | 25 | | Gbps | 1 |
| Bit Error Rate | BER | | | 10-12 | | |
| Operating Temperature | Тс | 0 | | 70 | °C | 2 |
| Storage Temperature | Tstg | -40 | | 85 | °C | 3 |
| Supply Current | Icc | | | 4 | mA | 4 |
| Input Voltage | Vcc | 3.14 | 3.3 | 3.46 | V | 4 |
| Cable Impedance | Z | 90 | 100 | 110 | Ω | |
| Product Weight | GD | | 90 | | g/PCS | 5 |
| Cable Weight | GC | | 44 | | G/M | |
| Dust Cap Weight | GS | | 0.80 | | g/PCS | |

Notes:

- 1. IEEE 802.3by.
- 2. Case temperature.
- 3. Ambient temperature.
- 4. For electrical power interface.

Cable Dimensions and Insertion Loss Level

| Length | Standard Wire Gauge AWG | Cable Diameter OD (mm) | Minimum Bending Radius R (mm) | Insertion Loss Level (Note 1) | Tolerance Range (±cm) |
|--------|----------------------------|------------------------|----------------------------------|-------------------------------|--------------------------|
| 5m | 26AWG | 5.6 | 30 | CA-25G-L | 6 |

Notes:

1. Cable insertion loss classification standard IEEE 802.3by 110-10.

Pin Descriptions

| Pin | Symbol | Name/Description | Notes |
|-----|------------|--|-------|
| 1 | VeeT | Transmitter Ground (Common with Receiver Ground). | 1 |
| 2 | Tx_Fault | Transmitter Failure Alarm. Not Used. | |
| 3 | Tx_Disable | Not Used. The signal turns off the module transmitter when it is "high" or "open." | |
| 4 | SDA | Data Line for Serial ID. | 2 |
| 5 | SCL | Clock Line for Serial ID. | 2 |
| 6 | MOD_ABS | Module Absent. Grounded within the module. | 2 |
| 7 | RS0 | No Connection Required. | |
| 8 | LOS | Loss of Signal Indication. "Logic 0" indicates normal operation. | |
| 9 | RS1 | No Connection Required. | |
| 10 | VeeR | Receiver Ground (Common with Transmitter Ground). | 1 |
| 11 | VeeR | Receiver Ground (Common with Transmitter Ground). | 1 |
| 12 | RD- | Receiver Inverted Data Out. AC Coupled. | |
| 13 | RD+ | Receiver Non-Inverted Data Out. AC Coupled. | |
| 14 | VeeR | Receiver Ground (Common with Transmitter Ground). | |
| 15 | VccR | Receiver Power Supply. | |
| 16 | VccT | Transmitter Power Supply. | |
| 17 | VeeT | Transmitter Ground (Common with Receiver Ground). | 1 |
| 18 | TD+ | Transmitter Non-Inverted Data In. AC Coupled. | |
| 19 | TD- | Transmitter Inverted Data In. AC Coupled. | |
| 20 | VeeT | Transmitter Ground (Common with Receiver Ground). | 1 |

Notes:

- 1. The circuit ground is isolated from the chassis ground.
- 2. Should be pulled up with $4.7k\Omega$ to $10k\Omega$ on the host board to a voltage between 2V and 3.6V.

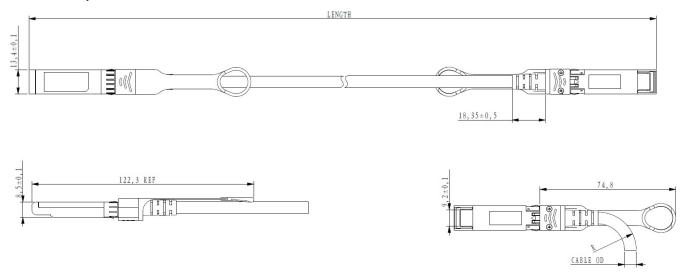
Electrical Pad Layout



Block Diagram of Transceiver



Mechanical Specifications



Unmarked Tolerance <u>+</u>0.2 Unit: mm

About Us:

Proline Options is one of North America's leading providers of transceivers and high speed cabling. With a reputation for quality, tested products that cover the connectivity spectrum, Proline Options has a solution for you regardless of the specification.

At Proline Options, every product is tested in its intended application - never batch or spec tested only. We run bandwidth, distance and IOS network tests. We have documented an impressive 0.03% failure rate over the last 10 years. To continue this rate of success we invest millions annually in our own on-site testing lab.



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