**DAC-SFP-25G-2-5M-OPC**

Dell® DAC-SFP-25G-2-5M Compatible TAA Compliant 25GBase-CU SFP28 Direct Attach Cable (Passive Twinax, 2.5m)

**Features**

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

**Applications:**

- 25GBase Ethernet

**Product Description**

This is a Dell® DAC-SFP-25G-2-5M compatible 25GBase-CU SFP28 to SFP28 direct attach cable that operates over passive copper with a maximum reach of 2.5m. It has been programmed, uniquely serialized, and data-traffic and application tested to ensure it is 100% compliant and functional. This direct attach cable is TAA (Trade Agreements Act) compliant, and is built to comply with MSA (Multi-Source Agreement) standards. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

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

**General Specifications**

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Notes |
|---|---|---|---|---|---|---|
| **Data Rate** | DR | | 25 | | Gbps | 1 |
| **Bit Error Rate** | BER | | | $10^{-12}$ | | |
| **Operating Temperature** | Tc | 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 | | 78 | | g/PCS | 5 |
| **Cable Weight** | GC | | 32 | | 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) |
|---|---|---|---|---|---|
| **2.5m** | 30AWG | 4.6 | 26 | CA-25G-N | 2 |

**Notes:**

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

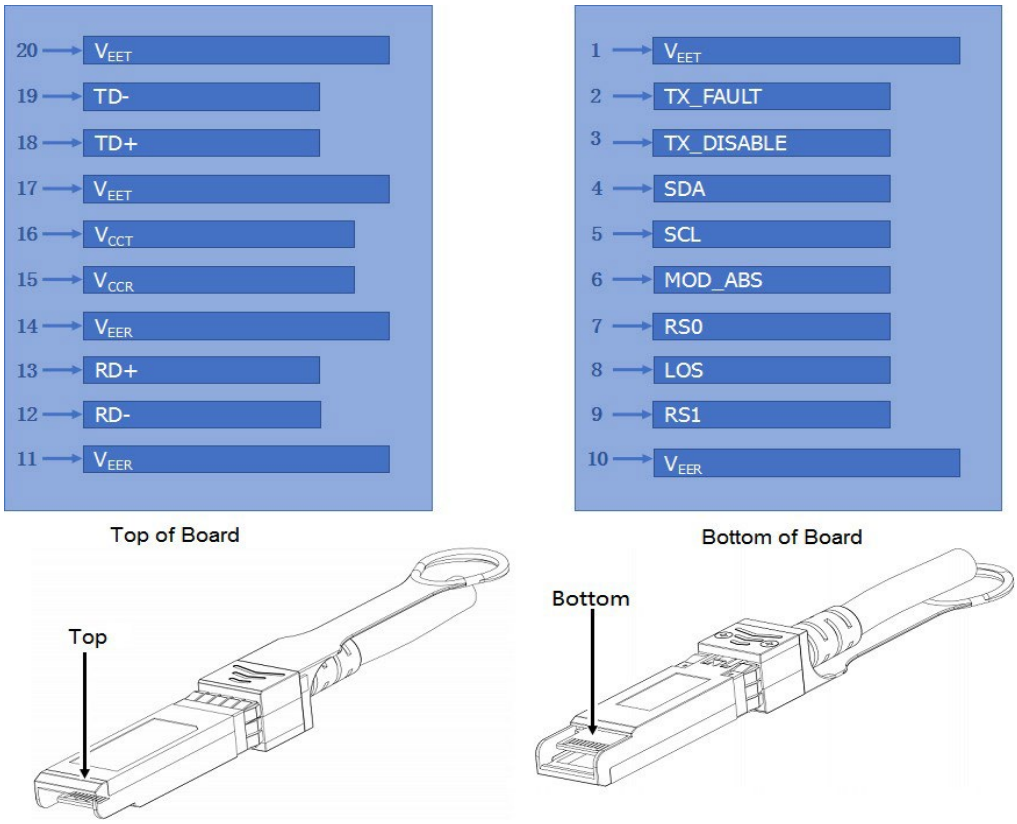
**Pin Descriptions**

| 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). | 1 |
| **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 |

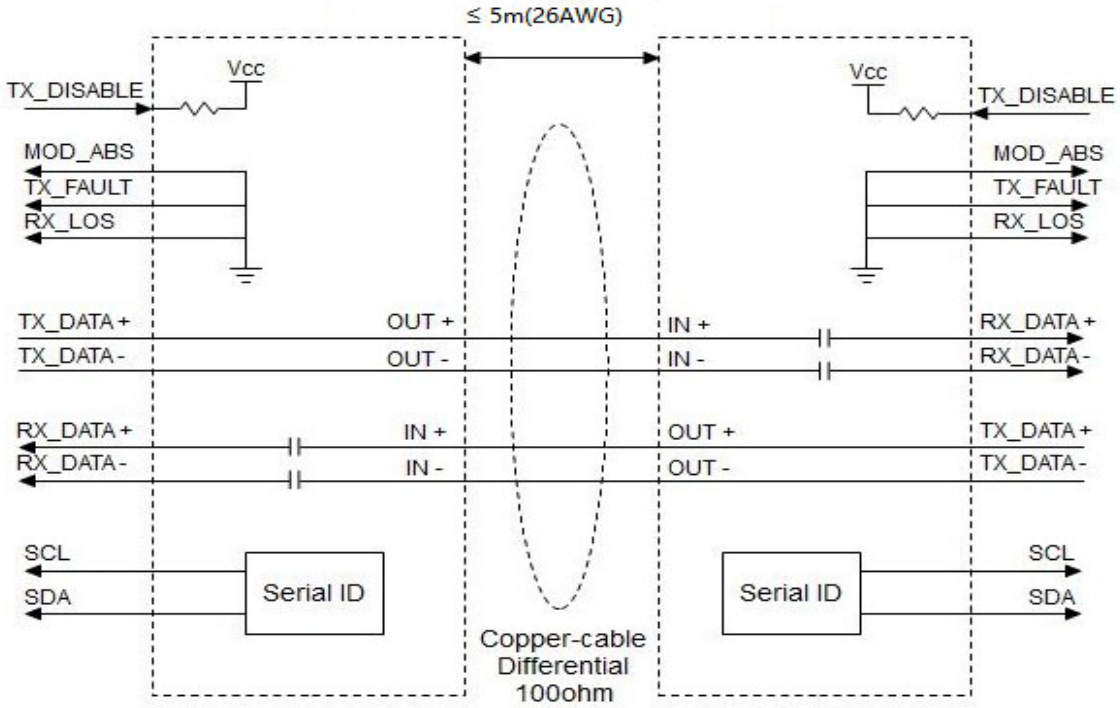
**Notes:**

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

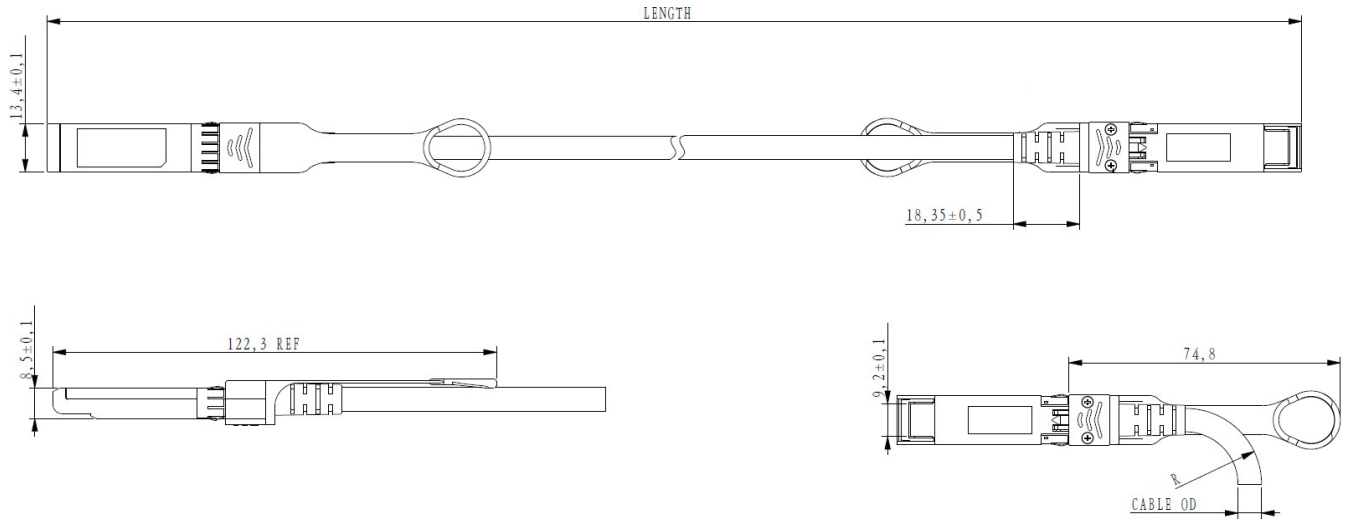
**Electrical Pad Layout**




**Block Diagram of Transceiver**



**Mechanical Specifications**




Unmarked Tolerance ±0.2
Unit: mm

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**Innovation for the Future of High-Speed Networking**

**Who We Are**
OptioConnect is reshaping the landscape of communication and high-speed networking through intelligent technology. With a core focus on cutting edge technology, we deliver smarter fiber optic solutions for enterprise networks, data centers, and next-gen telecom infrastructures.

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- Seamless OEM compatibility
- Scalable cost-efficiency

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Innovation isn't just a goal—it's our process. We embed AI and machine learning across our R&D and product lines, enabling adaptive performance, automated tuning, and faster deployment cycles. The result? Networks that don't just work—they learn, evolve, and outperform.

**Our Team**
Our engineers, data scientists, and network architects bring decades of experience and a future-focused mindset. We provide hands-on support with intelligent insights that turn complex challenges into simple solutions.

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