

Q100G-4S25D

QSFP28 to 4 SFP28 Twinax cable Passive 100G to 4x25G DAC

1. Product overview

GLOBALfiber Q100G-4S25D is a passive direct attach copper cable assembly for short-distance host interconnection.

2. Key features

QSFP28 to 4 x SFP28; 25.78 Gb/s per channel; up to 5 m.

3. Applications

100G / 25G Ethernet; switches, routers, HBAs and data centers.

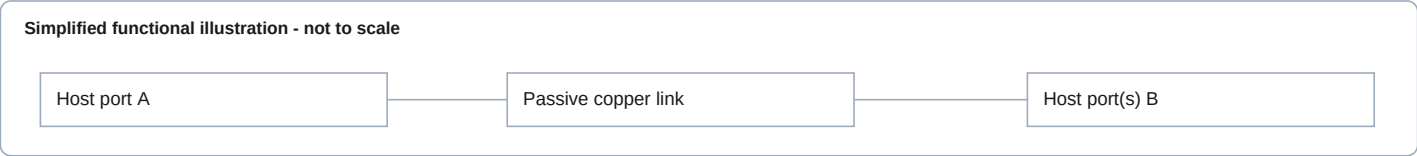
4. Technical data

Parameter	Specification	Parameter	Specification
Characteristic impedance	Min: 90; Typ.: 100; Max: 110; Unit: ohm	Common-mode tocommon-mode output return loss	Min: 2; Unit: dB; Note: At 0.2 to 19 GHz
Time delay	Max: 4.5; Unit: ns/m	Differential to common-mode return loss	Min: 12; Max: equation [3]; Unit: dB; Note: At 0.01 to 12.89
Time delay skew (in the same pair)	Max: 10; Unit: ps	Differential to common-mode return loss (continued)	Min: 10.58; Max: equation [4]; Note: At 12.89 to 19 GHz
Time delay skew (pair to pair)	Max: 50; Unit: ps	Differential-to-common conversion loss	Min: 10; Unit: dB
Differential Impedance	Min: 90; Typ.: 100; Max: 110; Unit: ohm	Differential-to-common conversion loss	Min: equation [5]
Insertion loss	Min: 8; Max: 22.48; Unit: dB; Note: At 12.8906 GHz	Differential-to-common conversion loss	Min: 6.3
Differential Return Loss	Min: 12.45; Max: equation [1]; Unit: dB; Note: At 0.05 to 4.1 GHz	Channel Operating Margin	Min: 3; Unit: dB
Differential Return Loss (continued)	Min: 3.12; Max: equation [2]; Unit: dB; Note: At 4.1 to 19 GHz		

5. Recommended operating conditions

Absolute limits are labelled separately and are not normal operating conditions.

Parameter	Specification
Supply voltage (absolute limit)	Min: -0.3; Max: 3.6; Unit: V
Data input voltage (absolute limit)	Min: -0.3; Max: 3.6; Unit: V
Caseoperating Temperature	Min: 0; Max: +70; Unit: °C
Supply Voltage	Min: +3.13; Typ.: 3.3; Max: +3.47; Unit: V
Power Dissipation	Max: 0.1; Unit: W
Operating relative humidity	Min: 5; Max: 85; Unit: %



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6. Optical characteristics

Not applicable. This is a passive copper cable; optical wavelength, launch power and receiver sensitivity do not apply.

7. Digital diagnostics and management

I2C EEPROM identification. Passive cable does not support LOS or TX_DISABLE; unsupported SFP28 signals are pulled down through 30 kohm.

8. Safety and regulatory

QSFP28 and SFP28 MSA; SFF-8402/8432/8665; IEEE 802.3bj; P802.3by; RoHS. Use ESD-safe handling and observe the stated cable bend limits.

9. Ordering information

Parameter	Specification
GLOBALfiber product number	Q100G-4S25D
Product description	QSFP28 to 4 SFP28 Twinax cable Passive 100G to 4x25G DAC
Selectable lengths	1 m, 1,5 m, 2 m, 3 m
Available coding	Arista, Cisco, Custom, Dell, Extreme, Generic, Huawei, Juniper, NVIDIA-Mellanox(ETH)

Confirm equipment model, port mode and software version when ordering. Coding availability does not guarantee support for every platform or mode.

Cable variants documented in the technical source:

Parameter	Specification
1m, 2m, 3m	Data Rate: Up to 100G; Wire Gauge: AWG30; Connector Type: Passive Copper; Temp. Range: 0-70°C; Cable Jacket: PVC
5m	Data Rate: Up to 100G; Wire Gauge: AWG26; Connector Type: Passive Copper; Temp. Range: 0-70°C; Cable Jacket: PVC