

O400G-DAC

OSFP 400G Flat Top Passive Direct Attach Copper Twinax DAC Cable

1. Product overview

GLOBALfiber O400G-DAC is a passive direct attach copper cable assembly for short-distance host interconnection.

2. Key features

Flat-top OSFP to OSFP; passive 400G copper twinax; maximum link length 2 m. Power: 0.1 W.

3. Applications

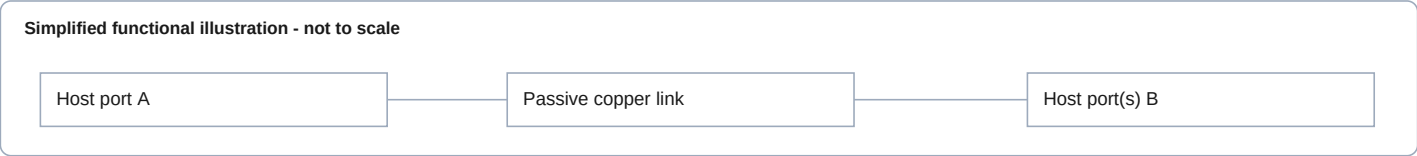
400G Ethernet.

4. Technical data

Parameter	Specification	Parameter	Specification
Construction	100 ohm twinax; 8 parallel pairs; each pair has two signal conductors and two drain wires in a shield	SDD11 / SDD22	-16.5+2*sqrt(f) dB maximum for 0.05-4.1 GHz; -10.66+14*log(f/5.5) dB maximum for 4.1-10 GHz; source test range 0.01-19 GHz
EMI shielding	Bulk cable shield connected directly to connector backshell	SCD21 - SDD21	-10 dB max for 0.01-12.89 GHz; -27+(29/22)*f dB max for 12.89-15.7 GHz; -6.3 dB max for 15.7-19 GHz
Current / contact voltage	0.5 A per contact / 30 VDC per contact	Mating / unmating force	OSFP <40 N / <30 N; test speed 10 mm/min
Low-level contact resistance	<2 ohm; EIA 364-23 at 20 mVDC, 100 mA	Latch / cable retention	125 N minimum latch strength; 90 N minimum bulk cable retention
Insulation resistance	10 Mohm minimum between adjacent contacts at 100 VDC	Wire flex	180°, 10 cycles at X/Y axis, 20 cycles/min, 1 kg suspended weight; EIA 364-41 Type C condition I; no microsecond discontinuities
Dielectric withstand	300 VDC minimum for 1 minute; no defect or breakdown between adjacent contacts	Durability	50 unplug/plug cycles; no physical damage
Temperature rise	+30°C maximum at rated current after 96 hours; 45 min ON / 15 min OFF per hour	Minimum bend radius	10 x cable outer diameter; no physical damage; continuity and signal integrity verified
Continuity	No open, short or high resistance		
SDD21 / SDD12	-17.16 dB minimum at 13.28 GHz; test range 0.01-19 GHz		

5. Recommended operating conditions

Parameter	Specification
Power consumption	0.1 W
Operating case temperature	0 to +70°C
Storage temperature	-40 to +85°C
Supply voltage	3.135 to 3.465 V
Relative humidity	85% maximum



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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

CMIS revision 4.0 management. Optical diagnostics do not apply to this passive copper cable.

8. Safety and regulatory

OSFP MSA; CMIS 4.0; EIA 364-1000; IEEE 802.3cd. Use ESD-safe handling and observe the stated cable bend limits.

9. Ordering information

Parameter	Specification
GLOBALfiber product number	O400G-DAC
Product description	OSFP 400G Flat Top Passive Direct Attach Copper Twinax DAC Cable
Selectable lengths	0,5 m, 1 m, 1,5 m, 2 m
Available coding	Generic, 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
0.5 m, 1 m	400G; 30 AWG; passive copper; 0-70°C; PVC (OFNR)
1.5 m, 2 m	400G; 28 AWG; passive copper; 0-70°C; PVC (OFNR)