

SFP28-PC

25GBase SFP28 Passive Copper Direct Attach Cable

Product Features

- Up to 25.78Gbps data rate
- Up to 5-meter transmission
- Hot-pluggable SFP 20 PIN footprint
- Improved Pluggable Form Factor (IPF) compliant for enhanced EMI/EMC performance.
- Compatible to SFP28 MSA
- Compatible to SFF-8402 & SFF-8432
- Low insertion loss and low crosstalk
- Cost-effective copper solution
- Lowest total system power solution
- Optimized design for Signal Integrity
- RoHS Compliant
- Available Temperature ranges:
 - 0°C to 70°C



Product Applications

- 25GBASE Ethernet
- Data Center

I. Absolute Maximum Ratings

Exceeding the limits below may damage the transceiver module permanently.

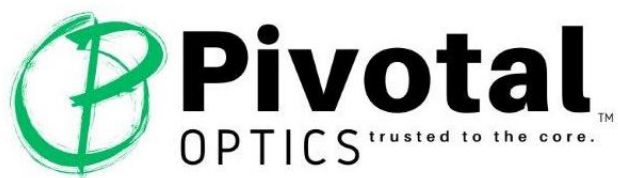
Parameter	Symbol	Min.	Typ.	Max.	Units
Maximum Supply Voltage	Vcc	-0.5		4.0	V
Storage Temperature	Ts	-40		85	°C
Operating Humidity	RH	5		95	%

II. Electrical (High Speed) Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Units	Notes
Operating Temperature		0		70	°C	
Differential Impedance	RIN,P-P	90	100	110	Ω	
Insertion loss	SDD21	8		22.48	dB	@ 12.8906 GHz

SFP28-PC

25GBASE, SFP28, Passive Copper
Direct Attach Cable Assembly



Differential Return Loss	SDD11	12.45		Note.1	dB	@ 0.05 to 4.1 GHz
	SDD22	3.12		Note.2	dB	@ 4.1 to 19 GHz
Common-mode to common-mode output return loss	SCC11	2			dB	@ 0.2 to 19 GHz
	SCC22					
Differential to common- mode return loss	SCD11	12		Note.3	dB	@ 0.01 to 12.89 GHz
	SCD22	10.58		Note.4	dB	@ 12.89 to 19 GHz
Differential to common- mode return loss	SCD21- IL	10				@ 0.01 to 12.89 GHz
				Note.5	dB	@ 12.89 to 15.7 GHz
		6.3				@ 15.7 to 19 GHz
Channel Operating Margin	COM	3			dB	

Notes:

1. Reflection Coefficient given by equation $SDD11(dB) < 16.5 - 2 \times \text{SQRT}(f)$, with f in GHz
2. Reflection Coefficient given by equation $SDD11(dB) < 10.66 - 14 \times \log_{10}(f/5.5)$, with f in GHz
3. Reflection Coefficient given by equation $SCD11(dB) < 22 - (20/25.78) \times f$, with f in GHz
4. Reflection Coefficient given by equation $SCD11(dB) < 15 - (6/25.78) \times f$, with f in GHz
5. Reflection Coefficient given by equation $SCD21(dB) < 27 - (29/22) \times f$, with f in GHz

III. Ordering Information

Part Number Breakdown			
SFP28-PC-XX			
Parameter	Min	Max	Notes
Cable Gauge (AWG)	24	30	
Cable Length (meters)	0.5	5	XX
Platform Advantage	Multi-Vendor coding options available upon request		

Notes:

1. Please contact sales for custom cable lengths and specific OEM Platform part numbers to fit your network.

Warranty

<https://pivotaloptics.com/warranty/>

Disclaimer

External physical characteristics are subject to variation. This may include, but is not limited to, external case designs, pull tab colors and/or shapes, removal latch styles or colors, and label sizes and placement. These variations do not affect the function or characteristics of the transceivers.