

SFP28 25G DAC 5M PassiveSFP28 25G DAC Passive Copper Cable

SFP28-CA-P5M-T

(For Cisco, HP, Aruba, Juniper, PaloAlto, Fortigate and others brand compatible)

TCONNECT



Features

- ◆ Up to 25.78125 Gbps data rate
- ◆ Up to 5 meter transmission
- ◆ Hot-pluggable SFP 20PIN footprint
- ◆ Improved Pluggable Form Factor (IPF) compliant for enhanced EMI/EMC performance
- ◆ Compatible to SFP28 MSA
- ◆ Compatible to SFF-8402 and SFF-8432
- ◆ Temperature Range: 0°C to 70°C
- ◆ RoHS Compatible

Applications

- ◆ 25GBASE Ethernet

Overview

The SFP28 passive cable assemblies are high performance, cost effective I/O solutions for 25G Ethernet. SFP28 copper cables allow hardware manufacturers to achieve high port density, configurability and utilization at a very low cost and reduced power budget.

Ordering information

Part Number	Product Description
SFP28-CA-P1M-T	SFP28 25G DAC 1M PassiveSFP28 25G DAC 1M 25GDAC1MSFP28 to SFP280~70°C30AWG
SFP28-CA-P2M-T	SFP28 25G DAC 2M PassiveSFP28 25G DAC 2M 25GDAC2MSFP28 to SFP280~70°C30AWG
SFP28-CA-P3M-T	SFP28 25G DAC 3M PassiveSFP28 25G DAC 3M 25GDAC3MSFP28 to SFP280~70°C30AWG
SFP28-CA28-P1M-T	SFP28 25G DAC 1M PassiveSFP28 25G DAC 1M 25GDAC1MSFP28 to SFP280~70°C28AWG
SFP28-CA28-P2M-T	SFP28 25G DAC 2M PassiveSFP28 25G DAC 2M 25GDAC2MSFP28 to SFP280~70°C28AWG
SFP28-CA28-P3M-T	SFP28 25G DAC 3M PassiveSFP28 25G DAC 3M 25GDAC3MSFP28 to SFP280~70°C28AWG
SFP28-CA-P5M-T	SFP28 25G DAC 5M PassiveSFP28 25G DAC 5M 25GDAC5MSFP28 to SFP280~70°C26AWG

Datasheet

Recommended Operating Conditions

Parameter	Symbol	Min	Typical	Max	Unit
Operating Case Temperature	Tc	0		+70	°C
Storage Ambient Temperature		-40		+85	°C
Power Supply Voltage	Vcc	3.14	3.3	3.47	V
Data Rate Per Lane		1		25.78	Gb/s

High Speed Characteristics

Parameter	Symbol	Min	Typical	Max	Unit	Note
Differential Impedance	R _{IN,P-P}	90		110	Ω	
Insertion loss	SDD21			22.48	dB	At 12.8906 GHz
Differential Return Loss	SDD11			See 1	dB	At 0.05 to 4.1 GHz
	SDD22			See 2	dB	At 4.1 to 19 GHz
Common-mode to common-mode output return loss	SCC11	2			dB	At 0.2 to 19 GHz
	SCC22					
Differential to common-mode return loss	SCD11			See 3	dB	At 0.01 to 12.89 GHz
	SCD22			See 4		At 12.89 to 19 GHz
Differential to common Mode Conversion Loss	SCD21			10	dB	At 0.01 to 12.89 GHz
				See 5		At 12.89 to 15.7 GHz
				6.3		At 15.7 to 19 GHz
Channel Operating Margin	COM	3			dB	

Notes:

1. Reflection Coefficient given by equation SDD11(dB) < 16.5 - 2 × SQRT(f), with f in GHz
2. Reflection Coefficient given by equation SDD11(dB) < 10.66 - 14 × log10(f/5.5), with f in GHz
3. Reflection Coefficient given by equation SCD11(dB) < 22 - (20/25.78)*f, with f in GHz
4. Reflection Coefficient given by equation SCD11(dB) < 15 - (6/25.78)*f, with f in GHz
5. Reflection Coefficient given by equation SCD21(dB) < 27 - (29/22)*f, with f in GHz

Pin Descriptions

PIN	Logic	Symbol	Name / Description	Note
1		VeeT	Transmitter Ground	
2	LV-TTL-O	TX_Fault	N/A	1
3	LV-TTL-I	TX_DIS	Transmitter Disable	2
4	LV-TTL-I/O	SDA	Tow Wire Serial Data	
5	LV-TTL-I	SCL	Tow Wire Serial Clock	
6		MOD_DEF0	Module present, connect to VeeT	
7	LV-TTL-I	RS0	N/A	1

Datasheet

8	LV-TTL-O	LOS	LOS of Signal	2
9	LV-TTL-I	RS1	N/A	1
10		VeeR	Receiver Ground	
11		VeeR	Receiver Ground	
12	CML-O	RD-	Receiver Data Inverted	
13	CML-O	RD+	Receiver Data Non-Inverted	
14		VeeR	Receiver Ground	
15		VccR	Receiver Supply 3.3V	
16		VccT	Transmitter Supply 3.3V	
17		Veet	Transmitter Ground	
18	CML-I	TD+	Transmitter Data Non-Inverted	
19	CML_I	TD-	Transmitter Data Inverted	
20		Veet	Transmitter Ground	

Notes:

1. Signals not supported in SFP+ Copper pulled-down to Veet with 30K ohms resistor
2. Passive cable assemblies do not support LOS and TX_DIS

Mechanical Dimensions

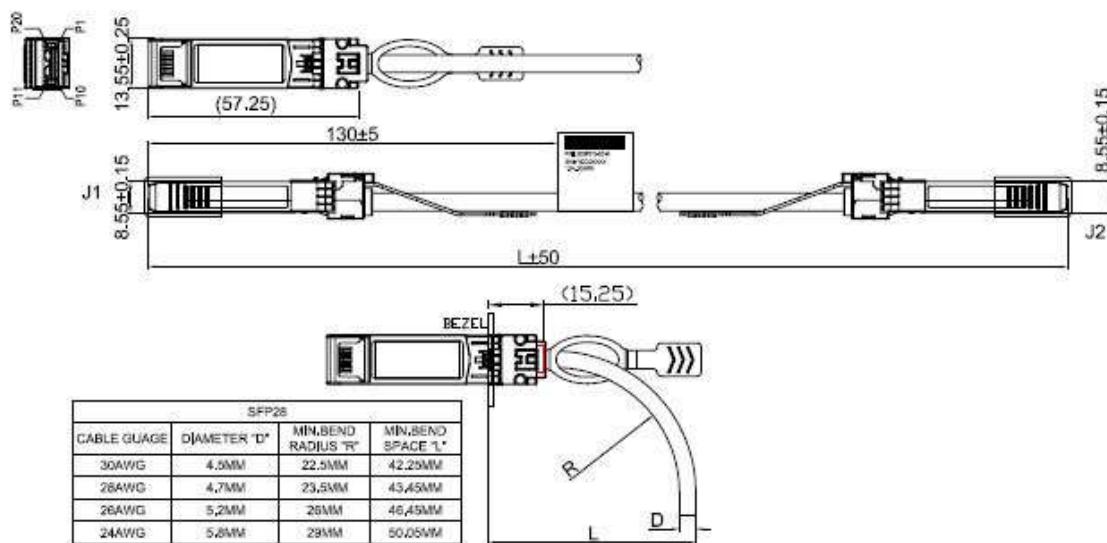


Figure1. Mechanical Specifications

ITK Connecting Co.,Ltd.

ITK Connecting reserves the right to make changes to or discontinue any optical link product or service identified in this document without notice in order to improve design and/or performance. If you have any question regarding this specification sheet, please contact our sales representative or send email to sales@itk.co.th