

# 10G SFP+ Passive Copper Cable

#### Features:

Support for multigigabit data rates up to 10.5Gbps
Data rates backward compatible to 1Gbps
Support for 1x, 2x, 4x and 8x Fibre Channel data rates
Hotpluggable SFP 20PIN footprint

I/O Connector designed for high speed differential signal applications Improved Pluggable FormFactor(IPF) compliant for enhanced EMI/EMC performance

Low Power Consumption < 0.5W

Power Supply :+3.3V Compatible to SFP+ MSA Temperature Range: 0~ 70 °C

RoHS Compatible



### **Applications:**

High capacity I/O in Storage Area Networks, Network Attached Storage, and Storage Servers Switched fabric I/O such as ultra high bandwidth switches and routers Data center cabling infrastructure

High density connections between networking equipment

#### **Description:**

The SFP+ active cable assemblies are high performance, cost effective I/O solutions for 10Gb Ethernet and 10G Fiber Channel applications. SFP+ copper modules allow hardware manufactures to achieve high port density, configurability and utilization at a very low cast and reduced power budget. The high speed cable assemblies meet and exceed Gigabit Ethernet and Fiber Channel industry standard requirements for performance and reliability.

### **Recommended Operating Conditions:**

Parameter	Symbol	Min	Typical	Max	Unit
Storage Ambient Temperature		40		+85	°C
Operating Case Temperature	Tc	0		+70	°C

### Systems:

	Media	
10.5 Gpbs line speed, full duplex Bit error rate: better than 10E12	Hotpluggable, industrystandard Small F copper cable, available as 1m,3m or 5n	



# **Direct Attach Cable**

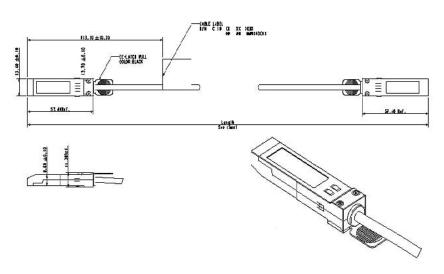
## **Pin Descriptions:**

	Logic	Symbol	Name/Description	Notes
1		VeeT	Transmitter Ground	
2	LVTTLO	TX_Fault	N/A	
3	LVTTLI	TX_DIS	Transmitter Disable	
4	LVTTLI/O	SDA	Tow Wire Serial Data	
5	LVTTLI	SCL	Tow Wire Serial Clock	
6		MOD_DEF0	Module present, connect to VeeT	
7	LVTTLI	RS0	N/A	
8	LVTTLO	LOS	LOS of Signal	2
9	LVTTLI	RS1	N/A	
10		VeeR	Reciever Ground	
11		VeeR	Reciever Ground	
12	CMLO	RD	Reciever Data Inverted	
13	CMLO	RD+	Reciever Data NonInverted	
14		VeeR	Reciever Ground	
15		VccR	Reciever Supply 3.3V	
16		VccT	Transmitter Supply 3.3V	
17		VeeT	Transmitter Ground	
18	CMLI	TD+	Transmitter Data NonInverted	
19	CML_I	TD-	Transmitter Data Inverted	
20		VeeT	Transmitter Ground	

### Note:

- 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:**





## **Direct Attach Cable**

### Ordering information:

T-QSFP-DAC-30-P1	1 meter 40G SFP+ Passive Copper Cable 30AWG
T-QSFP-DAC-30-P1.5	1.5 meter 40G SFP+ Passive Copper Cable 30AWG
T-QSFP-DAC-30-P2	2 meter 40G SFP+ Passive Copper Cable 30AWG
T-QSFP-DAC-30-P3	3 meter 40G SFP+ Passive Copper Cable 30AWG
T-QSFP-DAC-28-P5	5 meter 40G SFP+ Passive Copper Cable 28AWG
T-QSFP-DAC-24-P7	7 meter 40G SFP+ Passive Copper Cable 24AWG
T-QSFP-DAC-24-P10	10 meter 40G SFP+ Passive Copper Cable 24AWG

#### Notice:

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