

Our SFP+ Active Optical Cables are direct-attach fibre assemblies with SFP+ connectors. They have very good power consumption performance. They are suitable for very short distances and offer a cost-effective way to connect within racks and across adjacent racks. SFP+ Active Optical Cables length is up to 300 meters on OM3 MMF.

Key Features

- Low power consumption <0.35W per end
- Electrical interface compliant to SFF-8431
- Up to 300m on OM3 MMF
- 850nm VCSEL transmitter, PIN photo-detector receiver
- Operating case temperature 0 °C to +70°C
- 3.3V power supply voltage
- RoHS 6 compliant
- Hot Pluggable SFP+ form factor
- good EMI performance



Applications

- 10 Gigabit Ethernet
- 1x InfiniBand QDR, DDR, SDR
- High-performance computing clusters
- 4G and 8G Fibre Channel Applications
- Servers, switches, storage, host card adapters and datacentre

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit	Note
Storage Temperature	TST	-20	85	degC	
Relative Humidity(non-condensing)	RH	0	85	%	
Operating Case Temperature	TOPC	0	70	degC	
Supply Voltage	VCC	-0.3	3.6	V	

Recommended Operating Conditions and Supply Requirements

Parameter	Symbol	Min	Typical	Max	Unit
Operating Case Temperature	TOPC	0		70	degC
Power Supply Voltage	VCC	3.13	3.3	3.47	V
Power Consumption(per end)		-		0.35	W
Data Rate	DR		10.3		Gbps
Data Speed Tolerance	Δ DR	-100		+100	ppm

Optical Characteristics

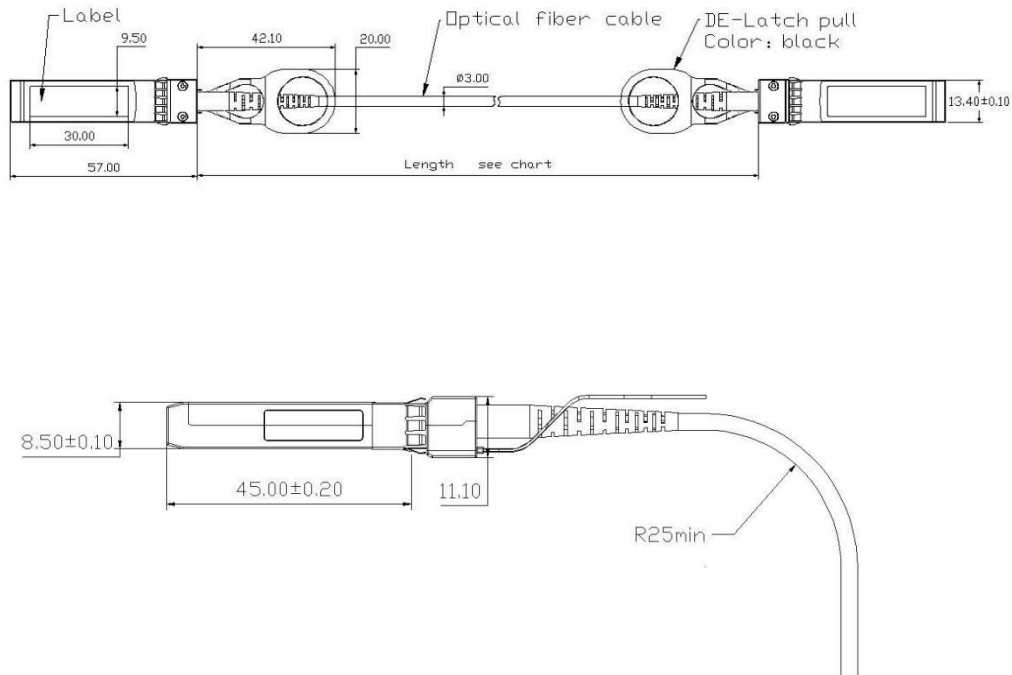
Parameter	Symbol	Min	Typical	Max	Unit	Notes
Transmitter						
Centre Wavelength	λ C	840	850	860	nm	
Average optical Power	PAVG	-6			dBm	
Rise/Fall Time	Tr/Tf			50	ps	
Extinction Ratio	ER	3.5			dB	
Relative Intensity Noise	Rin			-128	dB/Hz	
Optical Return Loss	TOL			12	dB	
Transmitter Reflectance	RT			-12	dB	

Receiver						
Centre Wavelength	λ_C	840	850	860	nm	
Overload, each lane	OVL	-1			dBm	
Receiver Sensitivity						

Electrical Specifications

Parameter	Symbol	Min	Typical	Max	Unit
Differential input impedance	Zin	90	100	110	ohm
Differential Output impedance	Zout	90	100	110	ohm
Differential input voltage amplitude	ΔV_{in}	100		1800	mVp-p
Differential output voltage amplitude	ΔV_{out}	400		800	mVp-p
Bit Error Rate	BR			E-12	
Input Logic Level High	V _{IH}	2.0		V _{CC}	V
Input Logic Level Low	V _{IL}	0		0.8	V

Dimensions



Ordering information

Part Number	Product Description
CHT-SFP-10G-AOCxM	10Gbps SFP+,AOC cable XXM 0°C ~ +70°C

X= Length