

SV-AOC-25GT5T5-XM

25Gbps, SFP28 Active Optical Cable module.



Features

- SFF-8432 Mechanical MSA
- 25G 850nm VCSEL transmitter
- 25G PIN photo-detector
- 2-wire interface for management specifications compliant with SFF 8472 digital diagnostic monitoring interface for optical transceivers
- Pre-terminated fiber cable
- Up to 70m/100m by active optical cable with OM3/OM4 fiber
- Operating environment temperature: 0 to 70°C
- SFP28 housing with enhanced EMI shielding
- 25G electrical interface (OIF CEI-28G-VSR)
- Maximum power consumption 1.0W each terminal
- Single 3.3V power supply
- RoHS compliant

Applications

- 25G Ethernet
- High capacity IO with SFP28 interface
- Data center and in-rack connection

Ordering Information

Part number	Description
SV-AOC-25GT5T5-1M	Starview SFP28 Active Optical Cable module supporting 25GbE,distance up to 1m
SV-AOC-25GT5T5-3M	Starview SFP28 Active Optical Cable module supporting 25GbE,distance up to 3m
SV-AOC-25GT5T5-5M	Starview SFP28 Active Optical Cable module supporting 25GbE,distance up to 5m
SV-AOC-25GT5T5-7M	Starview SFP28 Active Optical Cable module supporting 25GbE,distance up to 7m
SV-AOC-25GT5T5-10M	Starview SFP28 Active Optical Cable module supporting 25GbE,distance up to 10m
SV-AOC-25GT5T5-15M	Starview SFP28 Active Optical Cable module supporting 25GbE,distance up to 15m

Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit
Storage Temperature	Ts	-40		85	C
Operating Case Temperature	Tc	0		70	C
Power Supply Voltage	Vcc	0		3.6	V
Relative Humidity	RH	5		95	%

Recommended Operating Conditions

Parameter	Symbol	Min	Typical	Max	Units
Operating Case Temperature	Tc	0	25	70	C
Power Supply Voltage	Vcc	3.135	3.3	3.465	V
Data Rate, each Lane			25.78125		Gb/s
Data Rate Accuracy		-100		100	ppm
Control Input Voltage High		2		Vcc	V
Control Input Voltage Low		0		0.8	V
Fiber Bend Radius	Rbend	3			cm

Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Power Consumption				1.0	W	1
Supply Current	Icc			300	mA	1
Transmitter						
Overload Differential Voltage pk-pk	TP1a	900			mV	
Common Mode Voltage (Vcm)	TP1	-350		2850	mV	2
Differential Termination Resistance Mismatch	TP1			10	%	At 1MHz
Differential Return Loss (SDD11)	TP1			See CEI-28G-VSR Equation 13-19	dB	
Common Mode to Differential Conversion and Differential to Common Mode Conversion (SDC11, SCD11)	TP1			See CEI-28G-VSR Equation 13-20	dB	
Stressed Input Test	TP1a		See CEI-28G-VSR Section 13.3.11.2.1			

Receiver					
Differential Voltage, pk-pk	TP4		900	mV	
Common Mode Voltage (Vcm)	TP4	-350	2850	mV	2
Common Mode Noise, RMS	TP4		17.5	mV	
Differential Termination Resistance Mismatch	TP4		10	%	At 1MHz
Differential Return Loss (SDD22)	TP4		See CEI-28G-VSR Equation 13-19	dB	
Common Mode to Differential Conversion and Differential to Common Mode Conversion (SDC22, SCD22)	TP4		See CEI-28G-VSR Equation 13-21	dB	
Common Mode Return Loss (SCC22)	TP4		-2	dB	3
Transition Time, 20 to 80%	TP4	9.5		ps	
Vertical Eye Closure (VEC)	TP4		5.5	dB	
Eye Width at 10^{-15} probability (EW15)	TP4	0.57		UI	
Eye Height at 10^{-15} probability (EH15)	TP4	228		mV	

Notes:

1. Per terminal.
2. Vcm is generated by the host. Specification includes effects of ground offset voltage.
3. From 250MHz to 30GHz.