SV-QSFPDD-100G-ZR

Starview QSFP-DD 100Gbps Single Channel C-band tuneable coherent wavelengths SM (LC) with DDM distance up to 120km

Features

- Support Client-side Interfaces with CAUI-4/OTU4
- Support Line-side interoperable DP-QPSK with GFEC, SCFEC and OFEC
- Standard QSFP-DD type 2A form factor
- 76pin QSFP-DD MSA compliant connector
- Compliant to CMIS 4.0
- Compliant to OIF Implementation Agreement for Coherent CMIS, Rev 01.1
- RoHS compliant

Part number	Description
SV-QSFPDD-100G-ZR	Starview QSFP-DD 100Gbps module 100GBase Single Channel C-band tuneable coherent wavelengths SM (LC) with Digital Diagnostic Monitoring (DDM), distance up to 120km, supporting 100GE

Absolute Maximum Ratings

Parameter	Min	Max	Unit	Note
Storage Temperature	-40	85	℃	
Storage Humidity (Relative)	-	85	%	no-Condensing
Case Temperature	-5	75	℃	
Operating Humidity (Relative)	-	85	%	no-Condensing
Short term Operating Case Temperature		75	℃	
Power Supply Absolute Range	-0.3	3.63	V	
RX Optical Maximum Input Power	-	10	dBm	

Operating Environments

Parameter	Min	Max	Unit	Note
Operating Case Temperature	0	70	℃	
Operating Humidity (Relative)	-	85	%	no-Condensing
Power Supply Operating Range	3.135	3.465	V	
RX Optical Input Power	-	2	dBm	

Electrical Specifications

Parameter	Min	Typ.	Max	Unit
3.3V DC Power Supply Voltage	3.135	3.3	3.465	V
Power Dissipation(GFEC)		14.5		W
Power Dissipation(SCFEC)		14.5		W
Power Dissipation(oFEC)		17		W
Low Power Consumption			1.0	W
Module Inrush Current			100	mA/us
Turn-off Current	-100			mA/us
Power Supply Noise			25	mV

Optical Transmitter Specifications

Parameter	Min	Typ.	Max	Unit	Notes
Transmitter Frequency	193.1	193.7	196.1	THz	
Laser Frequency Accuracy	-1.8		1.8	GHz	
Laser LineWidth			300	kHz	
Transmitter Output Power	-8	-6.5	-6	dBm	
Transmitter Laser Disable Time			180	ms	
Output Power Stability	-1		1	dB	Difference over temperature, time, wavelength and aging.
Output Power Accuracy	-2		2	dB	Difference between the set value and actual value over aging.
Transmitter Turn-up Time from Warm Start			180	s	The maximum time from Module Low Pwr to Data Path Activated state.
Transmitter Turn-up Time from Cold Start			200	s	
Transmitter OSNR (Inband)	38			dB/0.1nm	
Transmitter Back Reflectance			-24	dB	
Transmitter Output Power with TX Disabled			-20	dBm	

Optical Receiver Specifications

Parameter	Min	Typ.	Max	Unit	Notes
Receiver Frequency	191.3	193.7	196.1	THz	
Input Power Range	-18		0	dBm	Signal power of the selected channel
Receiver Sensitivity (GFEC)		-29		dBm	
Receiver Sensitivity (SCFEC)		-30		dBm	
Receiver Sensitivity (oFEC)		-32		dBm	
OSNR Sensitivity (GFEC)		18.5		dB/0.1nm	
OSNR Sensitivity (SCFEC)		15		dB/0.1nm	
OSNR Sensitivity (oFEC)		11.5		dB/0.1nm	
Los Assert	-30		-28	dBm	
Los Hysteresis	1.0		2.5	dB	
CD Tolerance(ZR)	2400			ps/nm	Tolerance to Chromatic Dispersion.
CD Tolerance(MR)	20000			ps/nm	Tolerance to Chromatic Dispersion.
Input Power Transient Tolerance	-2		2	dB	Tolerance to change in input power with < 0.5 dB penalty to OSNR sensitivity.
Input Power Reading Accuracy	-2		2	dB	
Optical Return Loss	-20			dB	Optical reflectance at Rx connector input.
Receiver Turn-up Time from Cold Start			100	s	From module reset, with valid optical inputsignal present.