

SFP+ VOA Datasheet

Features

- SFP+/SFP Compact Form
- Hot Pluggable
- Duplex LC Connector
- Optical Power Monitoring
- I2C Communication Interface

Version History

Date	Version	Description
2024/12/31	1.0	Initialize

Order Information

Taclk Part Number	Description	Code
WZVOA-EM-SFP-D-N	Power off state: Dark No Power Detector	-

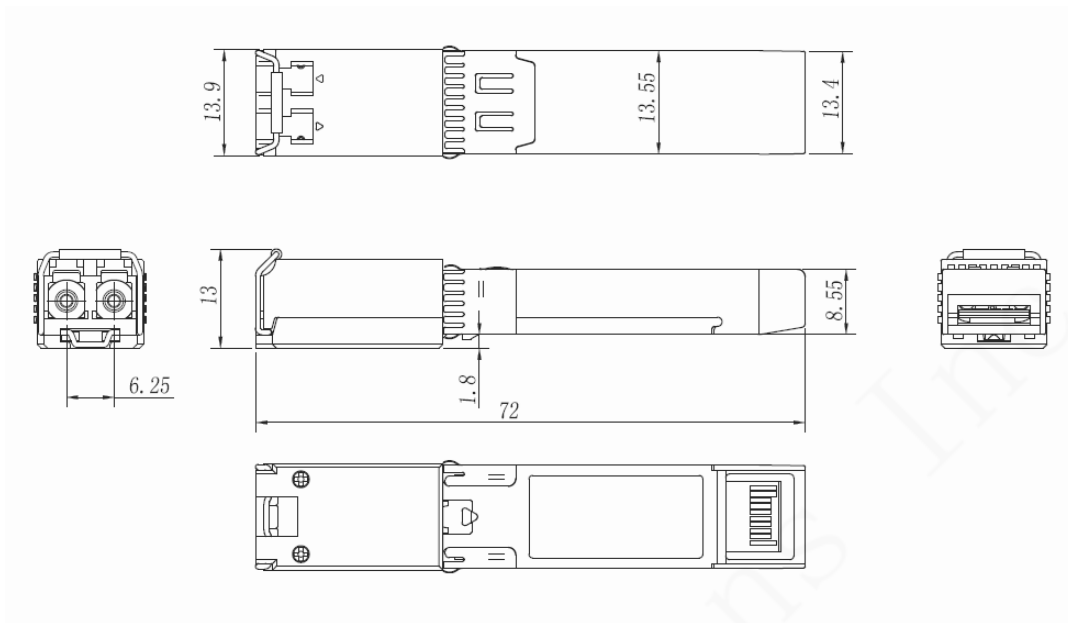
Operation/Storage Temperature and Humidity

Parameter	Specification	Unit	Note
Operating temperature	-10 ~ 65	°C	
Operation Humidity	5~90	%RH	
Storage Temperature	-25 ~ +85	°C	
Storage Humidity	5~95	%RH	

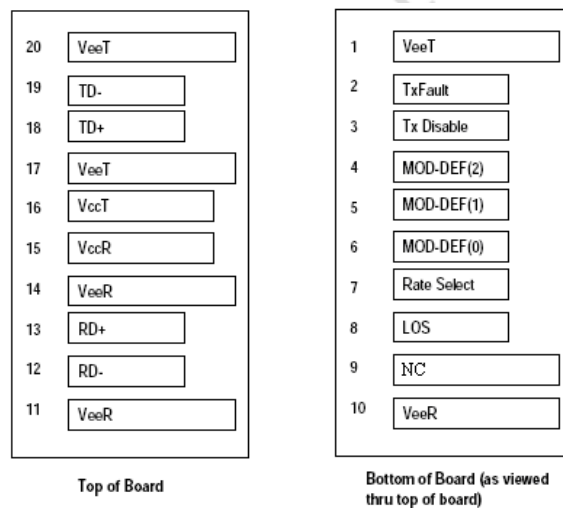
Optical Characteristics

Parameter		Min	Max	Unit
Operating Optical Input Power	without PD	-35	+20	dBm
Wavelength range		1524	1572	nm
Insertion Loss	without tap monitor		1.8	dB
Wavelength Dependence Loss	@ ≤10dB attenuation		0.7	dB
	@ ≤20dB attenuation		1.3	
Guaranteed Attenuation Dynamic Range		20		dB
Attenuation Step Resolution		0.1		dB
Attenuation Accuracy	Without PD @ 0 dB ≤ Att. ≤ 10dB	-0.7	0.7	dB
	Without PD @ 10 dB < Att. ≤ 20dB	-1.5	1.5	dB
Polarization Dependence Loss	0 dB ≤ Att. ≤ 10dB		0.5	dB
	10 dB < Att. ≤ 20dB		0.8	dB
Chromatic Dispersion		-0.05	0.05	ps/nm
Polarization Mode Dispersion			0.3	ps
Return Loss		40		dB
Block Attenuation Loss of VOA		35		dB

Mechanical Dimension



Hardware Interface



Pin Num.	Name	I/O	Plug Seq.	VOA Function
1	VeeT	Power	1	Digital Power GND
2	TX Fault (Module Fault)	Output	3	Pulled high by module to notify host of module fault of some kind. It will be always low in constant attenuation mode.
3	TX Disable (Module Disables)	Input	3	Module shutdown control (Set VOA to power-down state).
4	MOD-DEF2	In/Out	3	2 Wire Serial Interface SDA
5	MOD-DEF1	Input	3	2 Wire Serial Interface SCL
6	MOD-DEF0	GND	3	Grounded in Module To indicate the module is present
7	Rate Select	NA	3	NC
8	LOS	Output	3	Pulled high by module to notify host of “Loss of input power” alarm.
9	VeeR	NA	1	NC

10	VeeR	Power	1	Analog Power GND
11	VeeR	Power	1	Analog Power GND
12	RD-	NA	3	NC
13	RD+	NA	3	NC
14	VeeR	Power	1	Analog Power GND
15	VccR	Power	2	Analog Power +3.3V $\pm 5\%$,
16	VccT	Power	2	Digital Power +3.3V $\pm 5\%$
17	VeeT	Power	1	Digital Power GND
18	TD+	NA	3	NC
19	TD-	NA	3	NC
20	VeeT	Power	1	Digital Power GND

Plug Seq.: Pin engagement sequence during hot plugging.