10Gbps SFP+ Optical Transceiver

Model: NCM-SPF-TG-10

Features

- Multi-rate support from 1 Gbps to 11.1 Gbps
- Up to 10km transmission on SMF
- 1310nm DFP laser and PIN Photo-detector
- SFP+ Package with duplex LC Connector
- SFP+ (Small Form-factor pluggable Plus) SFF-8431 Compliant
- Digital diagnostic SFF-8472 Compliant
- Single 3.3V Power Supply
- Power consumption less than 1.5W
- All-metal Housing for Superior EMI Performance
- Hot Pluggable
- Telcordia GR-468 Compliant
- RoHS Compliant
- Operating case temperature
  Standard: -5 to 70 ℃
  Industrial: -40 to 85 ℃



NCM-SPF-TG-10

Unless otherwise noted, the above specifications reflect typical device performance at stated reference levels in the recommended operating configuration(s). Specifications are subject to change without notice.

NCM-SPF-TG-10 (1.1Rev2018) © 2000-2018 NCM Supplies – All Rights Reserved

NCM Supplies Inc.
8125 NW 64th ST. Miami, Florida 33166
Phone: 305-640-0461 Fax: 305-639-2684
ncm@ncmsupplies.com | www.ncmsupplies.com

10Gbps SFP+ Optical Transceiver

Model: NCM-SPF-TG-10

Description

NCM-SFP-TG-10 transceivers include a DFP Laser and PIN receiver comply with SFP+ (Small Form-factor pluggable Plus) SFF8431 msa and can support Multi-rate from 1 Gbps to 11.1 Gbps for 10G Ethernet LAN (10.325Gbps) and WAN (9.95Gbps) Applications on 10 km SMF. Digital diagnostic functions are available via I2C which Compliant with is SFF-8472.

Optical and Electrical Characteristics

Parameter	Symbol	Min	Typical	Max	Unit	Notes
Transmitter						
Average Output Power	Po	-6.5	-3.5	0.5	dBm	
Optical Modulation Amplitude	P_{OMA}	-5.2			dBm	
Disable Power	Poff			-40	dBm	
Extinction Ratio	ER	3.5	4.5		dB	
Output Centre Wavelength	λc	1260	1310	1355	nm	
Side Mode Suppression Ratio	SMSR	30			dB	
Spectral Width (-20dB)	$\Delta\lambda_{20dB}$			1	nm	
Dispersion Penalty	DP		2	3.2	dB	
Launch Power in OMA Minus TDP		-6.2			dBm	
Generation Jitter (20KHZ-80KHZ)	GJ			0.3	Ulp-p	
Receiver						
Minimum Sensitivity	Pmin			-14.4	dBm	3
Overload	Po	0.5			dBm	3
Stressed Sensitivity in OMA	P_{OMA}			-12.6	dBm	3
Input Center Wavelength	λ	1270		1610	nm	
LOS Assert	LOS_A	-28			dBm	
LOS De-Assert	LOS_D			-19	dBm	
LOS Hysteresis		1		4	dBm	
Reflectance Tolerance				-12	dB	
Jitter Tolerance		GR-253-CORE/ITU-T G.783				

Notes:

3.Measured at BER ≤ $1x10^{-12}$,10.3Gbps, PRBS 2^{31} -1, NRZ

Unless otherwise noted, the above specifications reflect typical device performance at stated reference levels in the recommended operating configuration(s). Specifications are subject to change without notice.

NCM-SPF-TG-10 (1.1Rev2018) © 2000-2018 NCM Supplies – All Rights Reserved

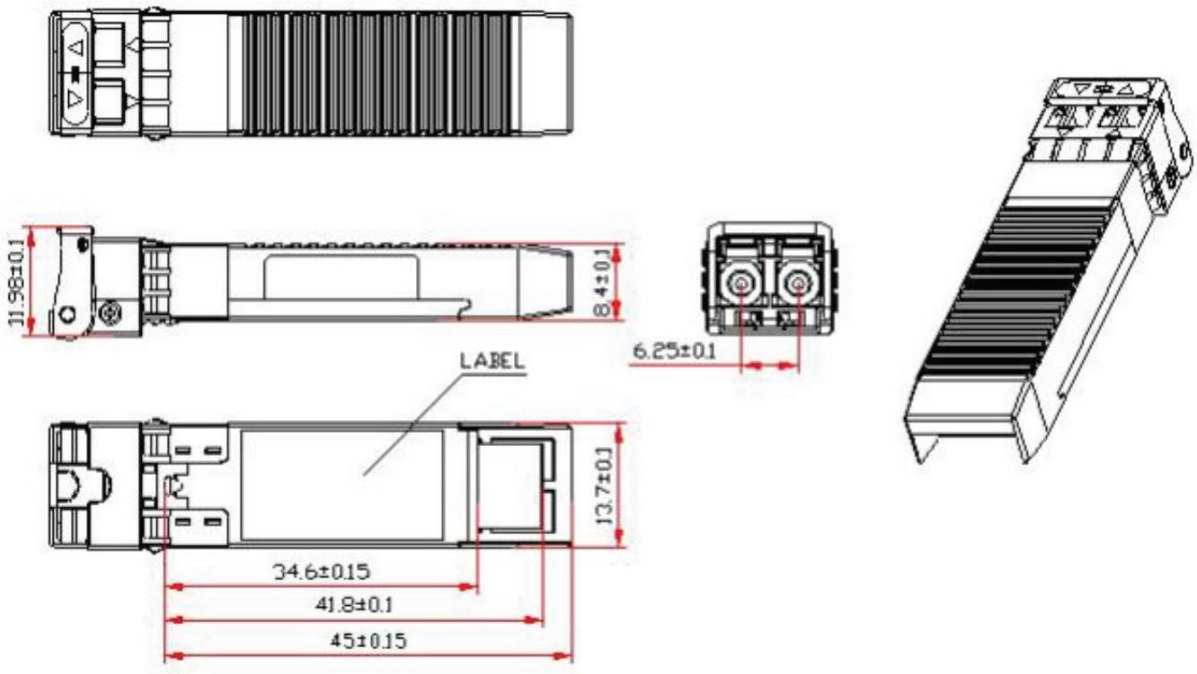
NCM Supplies Inc.
8125 NW 64th ST. Miami, Florida 33166
Phone: 305-640-0461 Fax: 305-639-2684
ncm@ncmsupplies.com | www.ncmsupplies.com

Model: NCM-SPF-TG-10

Diagnostic Specification

Parameter	Range	Accuracy	Unit
Temperature	-40 to +85	±3	℃
Voltage	0 to Vcc	0.1	V
Bias Current	0 to 80	5	mA
TX Power	-8.2 to 0.5	±2	dBm
RX Power	-30 to 1	±2	dBm

Mechanical Dimensions



Unless otherwise noted, the above specifications reflect typical device performance at stated reference levels in the recommended operating configuration(s). Specifications are subject to change without notice.

NCM-SPF-TG-10 (1.1Rev2018) © 2000-2018 NCM Supplies – All Rights Reserved

NCM Supplies Inc.
8125 NW 64th ST. Miami, Florida 33166
Phone: 305-640-0461 Fax: 305-639-2684
ncm@ncmsupplies.com | www.ncmsupplies.com