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Product Data

Key Highlights:

- **Type**: 50GBASE-SR SFP56
- **Compatibility:** Multi-Vendor MSA Compatible
- **Tx/Rx Wavelength:** 850nm
- **Laser:** VSCEL
- **Modulation:** PAM4
- **Fiber Type:** Multi-Mode Fiber (MMF)
- **Connectors:** LC
- **Optical Budget:** 1.9 dB
- **Max. Distance:** 100 m (OM4) / 70 m (OM3)
- **Data Rate:** 53.125 Gbps
- **Forward Error Correction:** Host FEC supported
- **DDM/DOM:** Supported
- **Power Consumption:** ≤2 W
- **Temperature:** Standard 0°-70°C

Optical Transceiver : 50G-SFP56-100

Product Description:

50G-SFP56-100 is a Multi-Vendor MSA Compatible 50GBASE-SR SFP56 (Small Form Pluggable 56). Transceiver designed for operation over multi-mode optical fiber. Module has a minimum guaranteed optical budget of 1.9 dB, which in most cases is enough to reach 100 m over OM4 multi-mode fiber, or 70 m over OM3 multi-mode fiber. However, distance is just an indicative parameter calculated for comfort of identification. Eventually we calculate distance taking in account minimal optical budget and average attenuation of optical cabling in industry. 50G-SFP56-100 uses 50Gb/s VSCEL (Vertical Cavity Surface Emitting Laser) (850 nm) transmitters and 50Gb/s PIN photodiode receiver. Module support DDM/DOM optical diagnostics, which provide diagnostic information about the present operating conditions. 50G-SFP56-100 operates in standard 0°-70°C temperature range and has an LC connector. 50GBASE-SR SFP56 supports up to 53.125 Gbps data rate and such applications as 10G, 25G, 50G Ethernet (53.125 Gbps). 50G-SFP56-100 optical transceiver is a multi-purpose module which can be used in various scenarios in today's networking environment. Most popular applications are Internet Service Provider (ISP), Mobile Operator and Data Center Core Networks.

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Transceiver is CE/RoHS certified and is compliant with product safety standards. The 50G-SFP56-100 transceiver is fully compliant to SFP56 Multi Source Agreement (MSA), IEEE802.3cd 50GBASE-SR standard. Consequently compliance to above standards guarantees that module is compatible and works with majority of networking equipment, where is not implemented special algorithm for protection against third party modules. However – our technical team has accumulated deep expertise in custom-encoded firmware's for 50GBASE-SR SFP56 transceivers in order to make it work in almost any brand of equipment. We will be glad to know your requirements – Contact Us.

Product Specification:

General parameter	Value
Media Type:	1 Lane of MMF
Connectors:	LC
TX Wavelength:	850 nm
RX Wavelength:	850 nm
Minimum Optical Budget:	1.9 dB
Maximum Distance:	100m
Supported Data Rate:	10.31, 25.78, 53.125 Gbps
Modulation:	PAM4
Supported Applications:	10G Ethernet | 25G Ethernet | 50G Ethernet
Digital Diagnostic Monitoring (DDM):	Supported
Forward Error Correction (FEC):	Host FEC supported
Operating Temperature Range:	Standard 0°- 70°C
Storage Temperature Range:	- 40° to 85°C
Relative Humidity (Non-Condensation):	5 to 95%
Power Consumption:	≤2W
Power Supply Voltage Typical:	+ 3.3V
Power Supply Voltage Range:	-3.135 to 3.465V
Compliance:	Class 1 FDA, IEC60825-1 Laser Safety Compliant, IEEE802.3cd 50GBASE-SR, RoHS-6, CE, SFP56 MSA, SFP-8472 V12.3, SFP-8431

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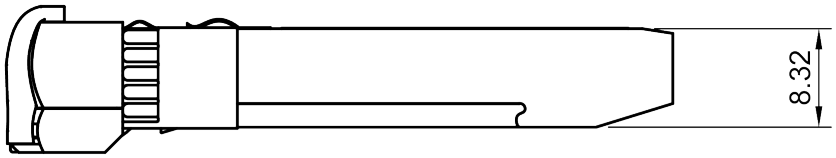
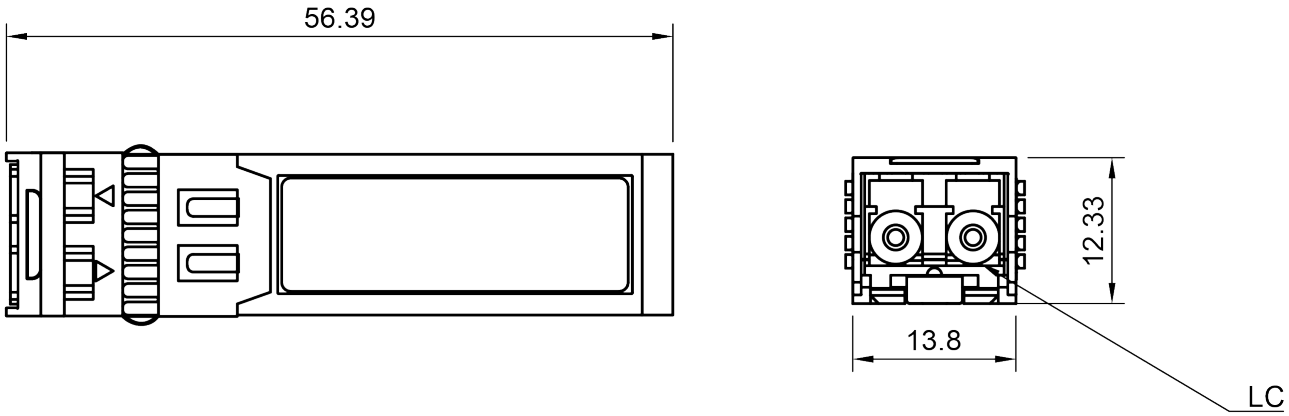
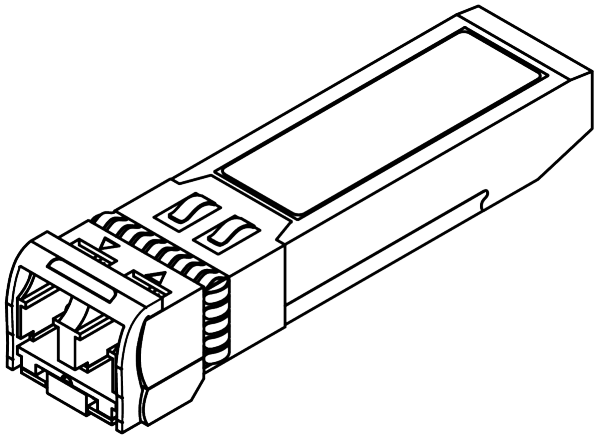
Transmitter Parameters:	Value
Transmitter Type:	VSCEL Laser
Tx Wavelength Bandwidth:	20 nm (840-860 nm)
Average Launch Power, Each Lane (Max):	-6 dBm
Average Launch Power, Each Lane (Min):	4 dBm
Extinction Ratio (Min):	3 dB

Receiver Parameters:	Value
Receiver Type:	PIN Photodiode Array
Rx Wavelength Bandwidth:	20 nm (840-860 nm)
Average Receive Power Each Lane (Min):	-7.9 dBm
Average Receive Power Each Lane (Max):	4 dBm
Damage Threshold Each Lane:	5 dBm

Mechanical Drawing







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Compatibility:

EDGE Optical transceivers can be provided with custom-encoded firmware, in order to provide compatibility with more then 100 vendor brands in data and telecom communications industry:

MS - General MSA
AD - ADVA
AE - Advantech
AL - Alcatel (Nokia)
AT - Allied Telesis
AR - Arista
AS - Arris
AV - Avaya
BC - Barracuda
BR - Broadcom
QL - Cavium (Qlogic)
CR- Ceragon
CP - Checkpoint
CH - Chelsio
CN - Ciena
CI - Cisco
LI - Cisco (Linksys)
CE - Comnet
CO - Coriant
DH - Dahua
DC - DCN
DL - Dell & Force10
DK - D-Link

DZ - DZS(Dasan-Zhone)
EI - ECI
EC - EdgeCore
EW - EdgeWare
EL - Eltex
EM - EMC2
EN - Enterasys
ER - Ericsson
EF - EXFO
EX - Extreme Networks
F5 - F5 Networks
FI - Finisar
FO - Fortinet
FU - Fujitsu
H3 - H3C
HI - Hirschmann
HU - Huawei
IB - IBM
IF - Infinera
IN - Intel
IX - Ixia
JU - Juniper Networks
KM - KeyMile

KY - KyLand
LN - Lenovo
ML - Mellanox
ME - Meraki (Cisco)
MT - MikroTik
MO - Moxa
MR - MRV
NC - NEC
NG - Netgear
NK - Nokia
NT - Nortel
NS - NSN
OR - Oracle
PA - Palo Alto Network
PL - Planet
QC - QCT(Quanta)
QN - QNAP
RD - RAD
RW - RadWare
RC - Raisecom
RK - Ruckus
RU - Ruijie Networks
SG - Samsung

SV - Sandvine
SC - Silicom
SF - SolarFlare
SW - Sonicwall
SM - Supermicro
SY - Synology
TC - Telco Systems
TP - TP-LINK
TN - Trendnet
UN - Ubiquiti Networks
VX - VeEx
WG - WatchGuard
WS - Waystream
WT - Westermo
ZT - ZTE
ZX - Zyxel
HP - HP
AG - Avago
OC - Oclaro
EU - Emulex
TM - Transmode
AU - HP Aruba
XX - Other

Warranty:

EDGE Optic's provides a limited **warranty for sixty (60) months** from Purchaser's receipt of the Equipment represented in this data sheet against defective design or workmanship. Warranty does not cover damage caused by improper

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