Part Number: E1MG-LX

Quick Spec:

Manufacturer Compatibility:	Brocade-Foundry
Form Factor:	SFP
TX Wavelength:	1310nm
Reach:	10km
Cable Type:	SMF
Rate Category:	1000Base
Interface Type:	LX
Digital Optical Mon. (DOM):	False
Connector Type:	Dual-LC

Features

- Up to 1.25Gb/s data links
- Hot-pluggable SFP Footprint
- Compliant with specifications for IEEE802.3Z
- Eye Safety Designed to meet Laser Class1 Compliant with IEC60825-1
- Single +3.3V Power Supply
- Standard Office Operating Temperature 0°C to +50°C
- RoHS compliance
- 10km links on standard 9/125 micron SMF

Applications

- Gigabit Ethernet
- 1x Fiber Channel
- Other optical links

Specification
Electrical and Optical Characteristics (Condition: Ta=TOP)

Parameter	Symbol	Min.	Typ	Max.	Unit
Transmitter Differential Input Volt	+/-TX_DAT	650		2000	mV p-p
Supply Current	I_{CC}		200	250	mA
Tx_Disable Input Voltage – Low	V_{IL}	0		0.8	V
Tx_Disable Input Voltage – High	V_{IH}	2.0		Vcc	V
Tx_Fault Output Voltage – Low	V_{OL}	0		0.8	V
Tx_Fault Output Voltage – High	V_{OH}	2.0		Vcc	V
Receiver Differential Output Volt	+/-RX_DAT	0.4		2000	mV p-p
Rx_LOS Output Voltage- Low	V_{OL}	0		0.8	V
Rx_LOS Output Voltage- High	V_{OH}	2.0		Vcc	V

FluxLight, Inc.

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Optical Characteristics

TX					
Parameter	**Symbol**	**Min**	**Typ**	**Max**	**Unit**
Data Rate	B	-	1250	-	Mb/s
Centre wavelength	λc	1296	1310	1330	nm
Output Spectral Width	Δλ	-	-	4	nm
Average Output Power	P_o	-9	-	-3	dBm
Extinction Ratio	EXT	10	-	-	dB
Data Input Voltage-High	V_{IHS}	V_{cc}-1.16	-	V_{cc}-0.89	V
Data Input Voltage -Low	V_{ILS}	V_{cc}-1.82	-	V_{cc}-1.48	V
Supply Current	I_{CC}	-	90	150	mA
Output Optical Eye	Compliant with IEEE802.3Z				

RX					
Parameter	**Symbol**	**Min**	**Typ**	**Max**	**Unit**
Receive Sensitivity	P_{min}	-	-	-21	dBm
Maximum Input Power	P_{MAX}	-3	0	-	dBm
Signal Detect Threshold-Assertion:	SD_{HIGH}	-	-	-23	dBm
Signal Detect Threshold-Deassertion:	SD_{LOW}	-35	-	-	dBm
Hysteresis	-	-	2.0	-	dBm
Output High Voltage	V_{OH}	V_{cc}-1.03	-	V_{cc}-0.89	V
Output Low Voltage	V_{OL}	V_{cc}-1.82	-	V_{cc}-1.63	V
Operating Wavelength	λc	1100	-	1600	nm
Supply Current	I_{CC}	-	80	110	mA

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E1MG-LX

Hot Pluggable, Dual-LC, 1310nm, SMF, 10km, Brocade-Foundry Compatible

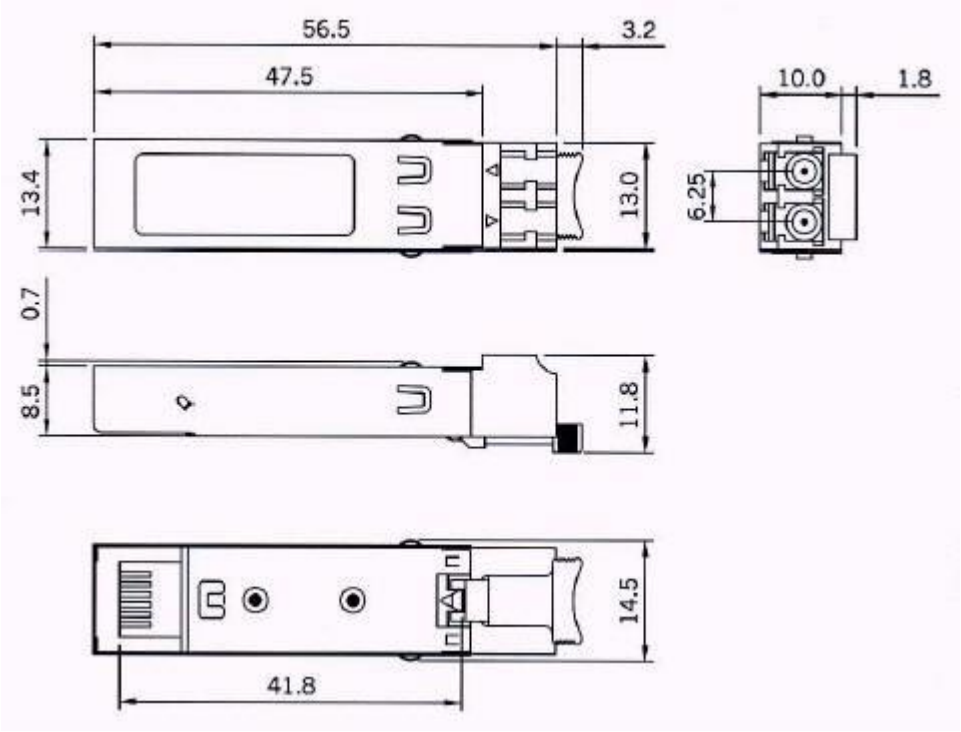
Absolute Maximum Ratings (T_C=25℃)

Parameter	Symbol	Min	Max	Unit
Storage Temperature	T_{ST}	-40	+85	°C
Operating Temperature (Ext)	T_{IP}	0	+50	°C
Input Voltage	T_{CC}	0	5	V

Recommended Operation Environment

Parameter	Symbol	Min	Typ	Max	Unit
Supply Voltage	V_{CC}	+3.0	3.3	+3.6	V
Operating Temperature	T_{OP}	0	-	+50	°C

Mechanical Drawing



Dimensions

Dimensions (H x W x D):8.5 x 13.4 x 56.5 mm

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