

MIL-SxL3-LT1Ax Military SFF Optical Transceiver



1x/2x Fiber Channel
3.3V, Mode Conditioned 1310nm FP Laser,
+3dB Optical Link Budget,
Multimode Applications

Applications

The MIL-SxL3-LT1Ax multimode optical fiber transceivers provide specialized solutions for 1x and 2x Fiber Channel multimode optical fiber data links with a duplex LC connector interface. These transceivers are fully compliant with the 1x and 2x Fiber Channel standards but can be used for any other data communications purpose within their operating parameters.

Ordering Information

Low Rider	MIL-S	X	L3	-	LT1A	X	X	
Roughrider ¹	MIL-S	X	L3	-	LT1A	X	X	-Rxxx

Shell Options

N=No GND Tabs
(Flat Shell)
T=GND Tabs

Temperature and Coating

H=-40 to 85C, No coating
M=-40 to 85C, Conformal coating

Mounting

BLANK= Solder Posts
(0.125 length)
B= Screw Posts
(0.050 length)

1. Consult the Roughrider worksheet on pg. 10 for pigtail options.

Key Features & Benefits

- Industry standard MSA 2x5 footprint
- IPC Class III assembly and construction
- Defocused 1310nm FP for Multimode applications
- Optical Link Budget increase by +3dB over standard device
- All metal construction for rugged environments
- RX data squelch on Signal Detect deassert
- Individual (separate) +3.3V power supply per port
- Industry standard duplex multimode LC receptacle
- Full compliance to ANSI FC requirements
- EN-60825/ IEC-825 / CDRH Class 1 Compliant
- Optional Parylene C conformal coating
- Optional addition of fiber pigtail

Transmitters: VCCTX = 3.135V to 3.465V, T_A = Operating Temperature Range

Parameter	Symbol	MIN	Typical	MAX	Unit
Optical Output Power ¹	P _O	-6.5		-3	dBm
Extinction Ratio	ER		9		dB
Supply Current	I _{CC}		120	160	mA

1. BER=10⁻¹² @ 1.25Gbps, PRBS 2⁷-1, NRZ, Compliant with ANSI X3.297 / FC-PH-2

Receivers: VCCTX = 3.135V to 3.465V, T_A = Operating Temperature Range

Parameter	Symbol	MIN	Typical	MAX	Unit
Optical Sensitivity ¹	P _I	-20		0	dBm
Optical Modulation Amplitude (p-p)	OMA	15			μW
Optical Return Loss	ORL	12			dB
Supply Current	I _{CC}		70	120	mA

1. BER=10⁻¹² @ 1.25Gbps, PRBS 2⁷-1, NRZ, Compliant with ANSI X3.297 / FC-PH-2

Stratos

MIL-SxL3-LT1Ax Military SFF Optical Transceiver

Connectivity for
Business-Critical Continuity™

Link Distances

Application	Fiber Specification	Distance
62.5/125 (200MHz*Km)	2x Fiber Channel – ANSI X3.297 FC-PI	150M
	1x Fiber Channel – ANSI X3.297 FC-PH-2	300M
50/125 (500MHz*Km)	2x Fiber Channel – ANSI X3.297 FC-PI	300M
	1x Fiber Channel – ANSI X3.297 FC-PH-2	500M

For more information on this product consult the MIL-SxL3-LT1Ax product data sheet.

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