
Connectorized ELEDS

Technical Data

LST0X00

Features

- Industry Standard FC and ST® Connectors
- 1300 nm Wavelength
- Linewidth <110 nm
- High Reliability
- Range of Flange Options
- -40°C to +80°C Operation

Applications

- Optical Data Communication Transmitters
- E-O Convertors
- LANS
- FDDI Networks
- FITL
- Single Mode: LST0400
- Multimode: LST0500

Description

The LST range of products includes a wide variety of connectorized ELED emitters for both single mode and multimode operation. The products have been developed for low cost and wide operating temperature applications such as telecom FITL and datacom FDDI LANS. Variants are available in industry standard connector types with a selection of mounting flange options.

The product range features a high reliability ridge waveguide ELED manufactured using our MOVPE process. The construction of the products includes a hermetically sealed ELED and is designed to be compatible with the environmental requirements of the Bellcore TA-TSY-000983 document.



Absolute Maximum Ratings

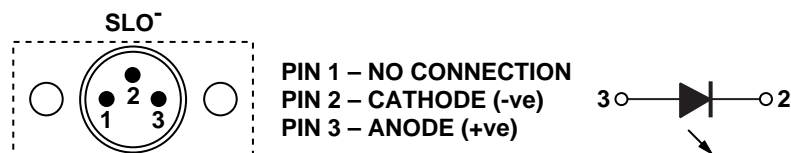
Absolute maximum limits mean that no catastrophic damage will occur if the product is subjected to these ratings for short periods, provided each limiting parameter is in isolation and all other parameters have values within the performance specification. It should not be assumed that limiting values of more than one parameter can be applied to the product at the same time.

Parameter	Symbol	Conditions	Limits		Units
			Min	Max	
Forward Current	If	DC	-	175	mA
Reverse Voltage	Vr	DC	-	2	V
Operating Temperature	Tc		-40	+80	°C
Storage Temperature	Ts		-40	+85	°C
Soldering		10 seconds	-	260	°C

Performance Specification

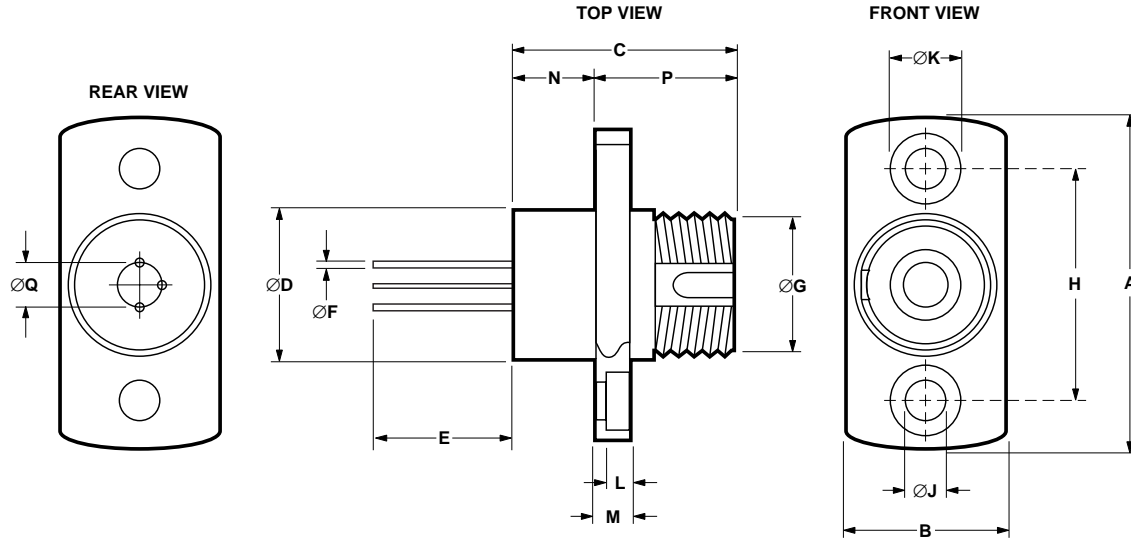
Parameter	Symbol	Test Conditions	Minimum	Maximum	Units
		CW, Tc = 25°C, If = 100mA unless otherwise stated			
Launched Optical Power	Po	LST0400: into 9/125 fiber	5	12	μW
		LST0500: into 50/125 fiber	50	-	μW
Optical Power Over Temp.	dPo/dT	Tc = -40°C to +80°C	-	± 6	dB
Central Wavelength	λ		1285	1345	nm
Spectral Width	Δλ	Tc = -40°C to +80°C	-	110	nm
Wavelength Temp Coefficient	dλ/dT	Tc = -40°C to +80°C	-	0.8	nm/°C
Rise/Fall Times	tr/τf	10% to 90% points	-	3	nS
Forward Voltage	Vf		-	1.7	V
Reverse Leakage	Vr	Bias = -2 V	-	200	μA

Electrical Pin Out



Mechanical Outline Options

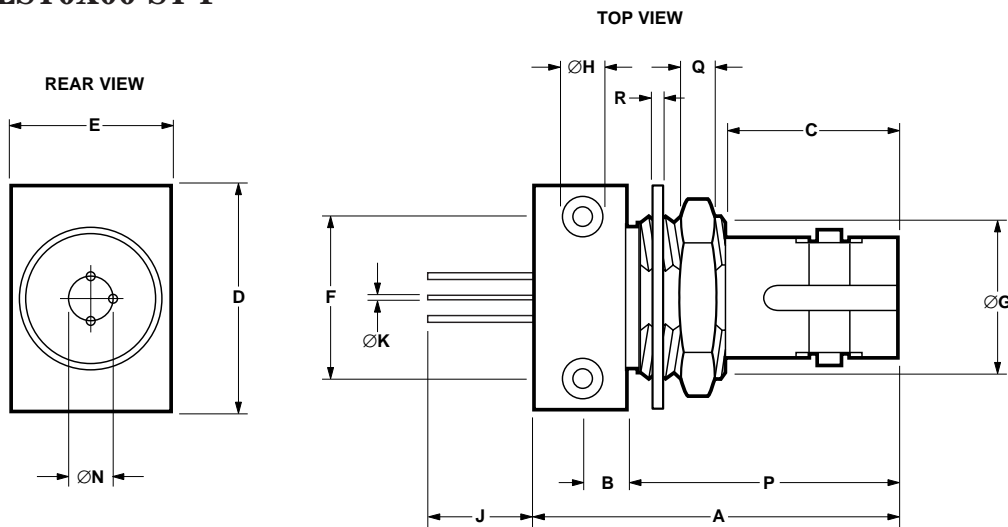
LST0X00-FC-A



DIM.	MIN.	MAX.	DIM.	MIN.	MAX.
A	-	19.50	$\varnothing J$	2.08	2.32
B	-	9.50	$\varnothing K$	-	4.20
C	-	13.0	L	-	1.70
$\varnothing D$	-	9.0	M	-	2.20
E	12.0	-	N	-	4.80
$\varnothing F$	0.41	0.47	P	-	8.20
$\varnothing G$	M8 x 0.75		$\varnothing Q$	2.54 NOM.	
H	13.35	13.55			

ALL DIMENSIONS IN MILLIMETERS

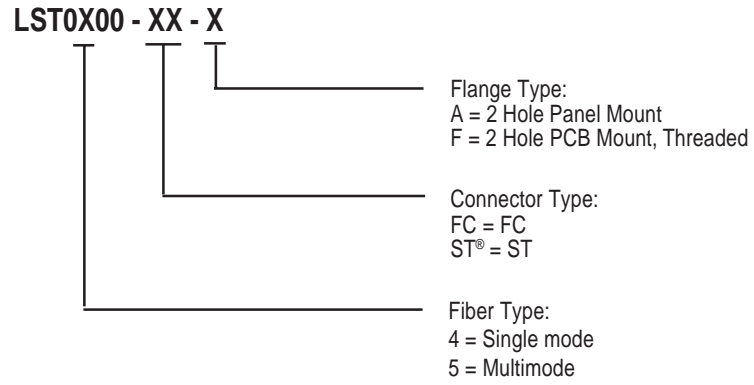
LST0X00-ST-F



DIM.	MIN.	MAX.	DIM.	MIN.	MAX.
A	-	21.0	$\varnothing H$	2-56 UNC-2B	
B	1.8	2.2	J	12.0	-
C	9.6	9.8	$\varnothing K$	0.41	0.47
D	-	12.9	$\varnothing N$	2.54 NOM.	
E	9.3	9.7	P	14.9	15.3
F	9.43	9.63	Q	2.54 NOM.	
$\varnothing G$	3/8-32 UNEF-2A		R	0.50 NOM.	

ALL DIMENSIONS IN MILLIMETERS

Ordering Information



Preferred Options:
LST0400-FC-A
LST0400-ST-F
LST0500-FC-A
LST0500-ST-F

Additional options are available to meet your specific needs.
Please contact your local representative for details.