4pin 1310nm 1.25Gb/s FP Laser Diode SC TOSA

LDM3S502-402

Features

- *Low threshold current*
- *Wide operating temperature range*
- *InGaAs ,PIN photodetector back-facet*
- *monitor*
- *High reliability*
- *Coaxial SC package*
- *Qualified to meet the intent of Telcordia reliability GR-468-CORE*
- *RoHS compliant*

Application

- *For trunk communications and LANs*

Absolute Maximum Ratings

Parameter		Symbol	Unit	Min	Max
Storage Temperature Range		Ts	°C	-40	85
Relative Humidity		RH	%	-	85°C
Monitor detector	Reverse photocurrent	IRD	mA	-	1
	Forward current	IFD	mA	-	2
	Reverse voltage	VRD	V	-	15
Laser chip	Forward current	IFL	mA	-	100
	Reverse current	IRL	mA	-	2
	Reverse voltage	VRL	V	-	2
Lead Solder Temperature		-	°C	-	260
Lead Soldering Time		-	s	-	10

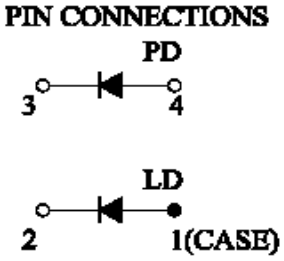
Recommended Operating Conditions

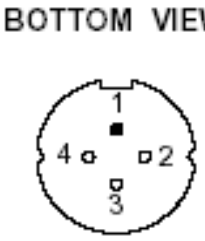
Parameter	Symbol	Unit	Min	Typ	Max
Case Operating Temperature Range	Tc	°C	-40	-	85
Operating Voltage	Vop	V	-	-	1.6

Specifications *(T=25℃, BOL ,unless otherwise noted)*

Parameter	Symbol	Unit	Min	Typ	Max	Test condition
Electrical Characteristics						
Threshold Current	Ith	mA	-	-	15	CW
			-	-	40	CW, over temperature
Monitor Current	Im	μA	80	-	1200	CW, If =Ith+14mA
Monitor Dark Current	Id	nA	-	-	100	VR=5V
Series Resistance	Rs	Ω	-	-	10	CW
Optical Characteristics						
Optical Output Power	Po	mW	0.1	-	0.6	CW,If =Ith+14mA
Central Wavelength	λc	nm	1260	1310	1360	CW, over temperature
Spectral Width	Δλ	nm	-	-	3	CW ,RMS
Rise/Fall Time	Tr/f	ns	-	-	0.3	CW
Tracking error	ΔPf	dB	-1.5	-	1.5	CW, Im=const@PO=0.3mW (25 °C),over temperature

Pin Description

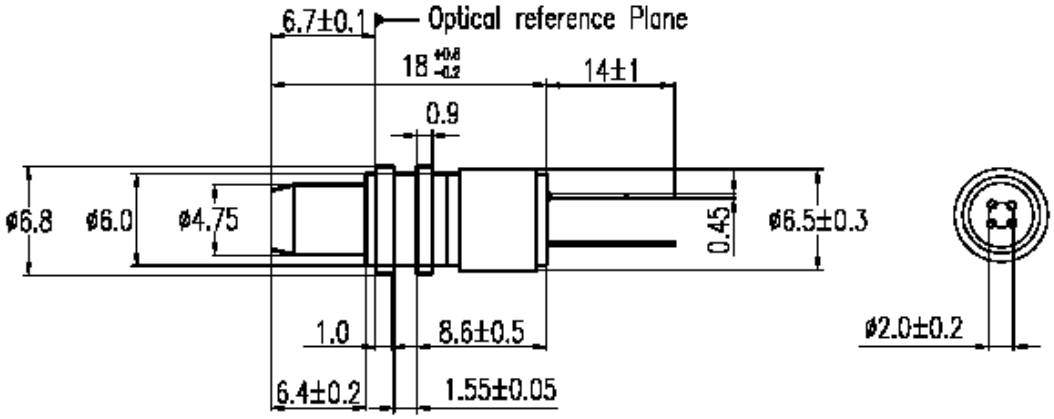




Pin No.	Description
1	LD ANODE(LD +)/GND
2	LD CATHODE
3	PD CATHODE
4	PD ANODE

Package Outline *(unit: mm)*

Unless otherwise noted +/- 0.1mm, some dimensions can be customized



Ordering Information

Part No	Specification					
	Package	Datarate	Laser	Optical Power	Temp	Others
LDM3S502-402	SC TOSA	1.25G	1310nm FP	0.1~0.6mW	-40~85°C	

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