



1550nm 622Mb/s DFB SC TOSA

LDM5S512-001

Features

- *Operating wavelength range: 1550nm*
- *Low threshold current*
- *Wide operating temperature*
- *High-stability DFB laser chip*
- *4-pin coaxial-SC package*

Application

- *STM-4 SDH/SONET transmitter and Transceiver Module*
- *Other Applications*

Absolute Maximum Ratings

Parameter	Symbol	Unit	Min	Max
Storage Temperature Range	Ts	°C	-40	85
Case Operating Temperature Range	Tc	°C	-40	85
LD Forward Current	IfLD	mA		150
LD Reverse Voltage	VrLD	V		2
PD Forward Current	IfPD	mA		2
PD Reverse Voltage	VrPD	V		20
Relative Humidity	RH	%		95
Lead solder temperature	-	°C		260
Lead solder duration	-	S		10

Specifications (Tc=25 °C, unless otherwise noted)

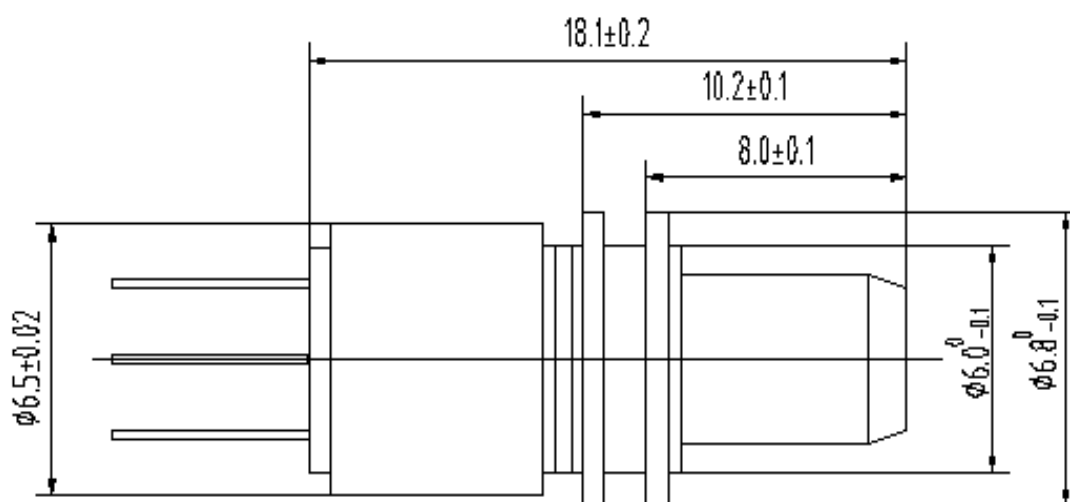
Parameter	Symbol	Unit	Min	Typ	Max	Test condition
Electrical Characteristics						
Operating Voltage	Vop	V	-	1.2	1.8	IfLD = Iop
Threshold Current	Ith	mA	-	10	30	CW
Rise/Fall Time	Tr/f	ns	-	0.2	0.4	Ib=Ith,10-90% or 90-10%
Monitor Current	Im	μA	100	-	1000	CW, at rated optical output power If=Ith+14mA
Monitor Dark Current	Id	nA	-	-	50	VRD=5V
			-	-	100	VRD=5V, over case operating temperature
Optical Characteristics						
Optical Output Power	Po	mW	0.5	-	1.8	CW, If=Ith+14mA
Slope Efficiency	Se	mW/mA	0.035	-	0.13	
Central Wavelength	λc	nm	1530	1550	1570	CW Over temperature
Side-mode suppression ratio	SMSR	dB	30	40	-	CW Over temperature
Tracking Error	ΔPf	dB	-1	-	+1	CW Im=const@Pf=1mw over case operating temperature
Connector Repeatability		dB	-1.5	-	+1.5	

Pin Description

Pin	Description
1	LD anode (case)
2	LD cathode
3	PD cathode
4	PD anode



Package Outline



Note: All dimension are in mm.

Ordering Information

Part No.	Specification							
	Package	Datarate	Laser	Optical Power	Detector	Sensitivity	Temp	Others
LDM5S512-001	SC TOSA	622Mb/s	1550nm DFB	0.5~1.8mW	--	--	-40~85°C	

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