



1310nm 1.25G&2.5Gb/s SC TOSA

LDM3S506 Series

Features

- *Data rate up to 2.5Gb/s*
- *Low threshold current*
- *Wide operating temperature range*
- *InGaAs, PIN photodetector back-facet monitor*
- *4pin Coaxial SC package*

Applications

- *SONET OC-24/OC-48 and SDH STM-16 Receiver and Transceiver Module*
- *1X9/GBIC Module*
- *1.25G Ethernet Transceiver Module*
- *1G Fiber Channel Transceiver Module*

Absolute Maximum Ratings

Parameter	Symbol	Unit	Min	Max
Storage Temperature Range	T_s	°C	-40	85
Relative Humidity	RH	%	-	95
Laser Diode Reverse Voltage	V_{RL}	V	-	2
Laser Diode Forward Current	I_{FL}	mA	-	100
Monitor Diode Reverse Voltage	V_{RD}	V	-	15
Monitor Diode Forward Current	I_{FD}	mA	-	2
Lead Solder Temperature	-	°C	-	260
Lead Soldering Time	-	s	-	10

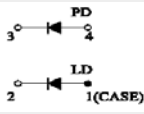
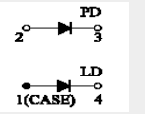
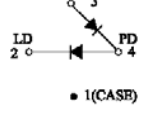
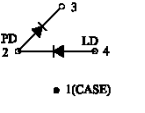
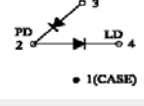
Recommended Operating Conditions

Parameter	Symbol	Unit	Min	Typ	Max
Case Operating Temperature Range	T_c	°C	-40	-	+85
Operating Voltage	V_{OP}		-	-	1.6

Specifications ($T=25\text{ }^\circ\text{C}$, unless otherwise noted)

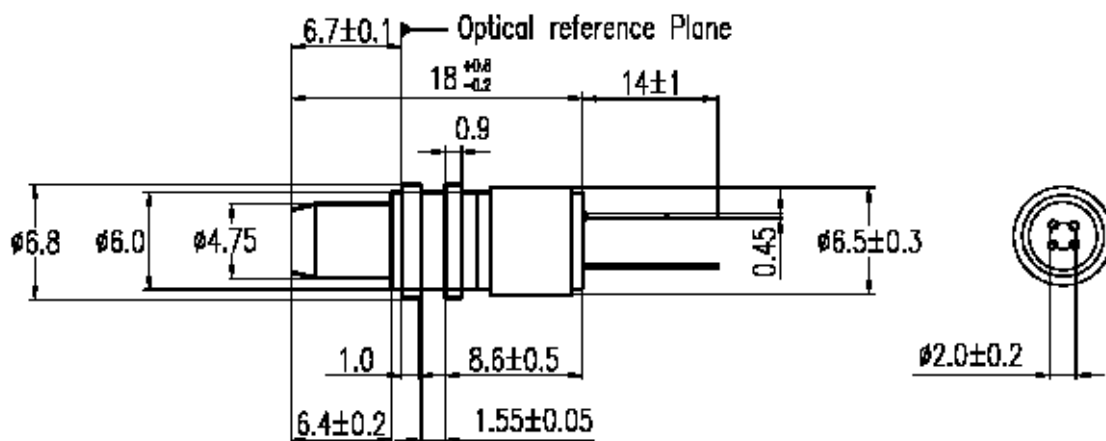
Parameter	Symbol	Unit	Min	Typ	Max	Test condition
Electrical Characteristics						
Threshold Current	I_{th}	V	-	10	15	CW
			-	-	28	CW, over temperature
Rise/Fall Time	$T_{r/f}$	ns	-	-	0.15	$I_b = I_{th}$; 20%~80%
Monitor Current	I_m	μA	100	-	1100	CW, $V_{RD}=5V$
Monitor PD Capacitance	C	pF	0.2	0.4	-	$V_{RD}=5V$, $f=1MHz$
Monitor Dark Current	I_d	nA	-	-	-	CW, $V_{RD}=5V$
			-	-	10	CW, $V_{RD}=5V$, over temperature
Optical Characteristics						
Optical Output Power	P_o	mW	0.2	0.5	-	CW, $I_f = I_{th} + 20mA$
Central Wavelength	λ_c	nm	1290	1310	1330	CW
			1270	-	1345	CW, over temperature
Spectral Width	$\Delta\lambda$	nm	-	-	5	CW, RMS
Tracking Error	ΔP_f	dB	-1.5	-	+1.5	CW, over temperature $I_m = \text{const}@P_f(I_{th} + 20mA)$
Connector Repeatability	-	dB	-1.0	-	1.0	

Pin Descriptions

Part No.	Description	Part No.	Description
LDM3S506-900		LDM3S506-901	
LDM3S506-SC-1		LDM3S506-SC-2	
LDM3S506-904			

Package Outline (Unit: mm)

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



Ordering Information

Part No.	Specification						Others (pin connection)
	Package	Datarate	Laser	Optical Power	Temp		
LDM3S506-900	4pin SC TOSA	1.25G/2.5G	1310nm FP	0.2 mW	-40~85		
LDM3S506-901*	4pin SC TOSA	1.25G/2.5G	1310nm FP	0.2 mW	-40~85		
LDM3S506-SC-1	4pin SC TOSA	1.25G/2.5G	1310nm FP	0.2 mW	-40~85		
LDM3S506-SC-2	4pin SC TOSA	1.25G/2.5G	1310nm FP	0.2 mW	-40~85		
LDM3S506-904*	4pin SC TOSA	1.25G/2.5G	1310nm FP	0.2 mW	-40~85		

*: The product marked with * is not available at present.

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