



## Mini BOSA-LC 1.25Gbps

### Features:

- 1x0nm FP laser
- Designed for short or long reach application
- -40°C to +85°C operation
- High reliability
- Single +3.3V power Supply

### Applications:

- Optical communication systems

### Absolute Maximum Ratings:

Parameter	Symbol	Min	Max.	Unit
LD Reverse Voltage	$V_{r(LD)}$	--	2	V
LD Forward Current	$I_{f(LD)}$	--	120	mA
PD Forward Current	$I_{f(PD)}$	--	2	mA
PD Reverse Voltage	$V_{r(PD)}$	--	15	V
Operating Temperature	Top	-40	85	°C
Storage Temperature	Tstg	-40	85	°C
Lead Solder Temperature	--	--	260	°C
Lead Soldering Time	--	--	10	s

### Transmitter Optical& Electrical Characteristics (T=25°C):

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Threshold Current	Ith	--	--	--	15	mA
Forward Voltage	Vf	Iop=Ith+20mA	--	--	1.6	V
Monitor Current(MPD)	Im	Iop=Ith+20mA	100	--	1000	uA
Dark Current(MPD)	Id	Vr=5V	--	--	100	nA
Optical Output Power	Po	Iop=Ith+20mA	0.25	--	0.65	mW
			0.4	--	0.8	mW
Slope efficiency	SE	Iop=Ith+20mA	0.012	--	0.032	mW/mA
			0.02	--	0.04	mW/mA
Central Wavelength	$\lambda_c$	Iop=Ith+20mA	1290	1310	1330	nm
Spectral Width ,RMS	$\Delta\lambda$	Iop=Ith+20mA	--	--	3	nm
Rise/Fall Time	Tr/Tf	20~80%	--	--	200	ps
Tracking Error	TE	, -40°C~85°C	-1.5	--	+1.5	dB

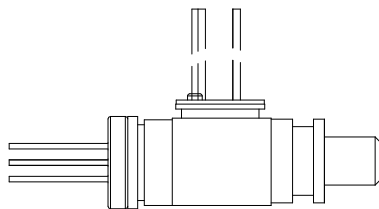
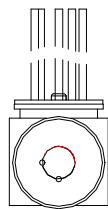
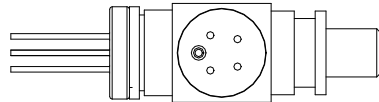
### Receiver Optical/Electrical Characteristics:



Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Operating Voltage	Vcc	--	3.0	3.3	3.6	V
Supply current	Icc	Vcc=3.3V	23	28	35	mA
Operating Wavelength	$\lambda c$	--	$\lambda-30$	$\lambda c$	$\lambda+30$	nm
RSSI Offset Current	Id	Vcc=3.3V	--	--	100	nA
Sensitivity	Sen	1.25Gbps,PRBS7,	--	--	-24	dBm
Overload	OL	ER=10dB,BER=10E-10	0	--	--	dBm

Note: $\lambda c=1490nm,1550nm$

## TYPE A 1





## TYPE B

