



## Bi-directional Optical Sub Assembly (BOSA)

### Features:

- Designed for short or long reach application
- InGaAs PIN Photodiode
- Single +3.3V power Supply
- MQW FP Laser device

### Specifications:

#### 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	$V_{r(PD)}$	--	20	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	--	--	9	15	mA
Forward Voltage	Vf	Iop=21mA	--	1.3	1.6	V
Monitor Current(PD)	Im	Iop=21mA	100	--	1000	uA
Dark Current(PD)	Id	Vr=5V	--	--	10	nA
Optical Output Power	Po	Iop=21mA	0.17	--	0.40	mW
Slope efficiency	SE	Iop=21mA	0.014	--	0.033	mW/mA
Central Wavelength	$\lambda_c$	Iop=21mA	1290	1310	1330	nm
Spectral Width , -20dB	$\Delta\lambda$	Iop=21mA	--	--	3	nm
Tracking Error	TE	-40°C~85°C	-1.5	--	+1.5	dB



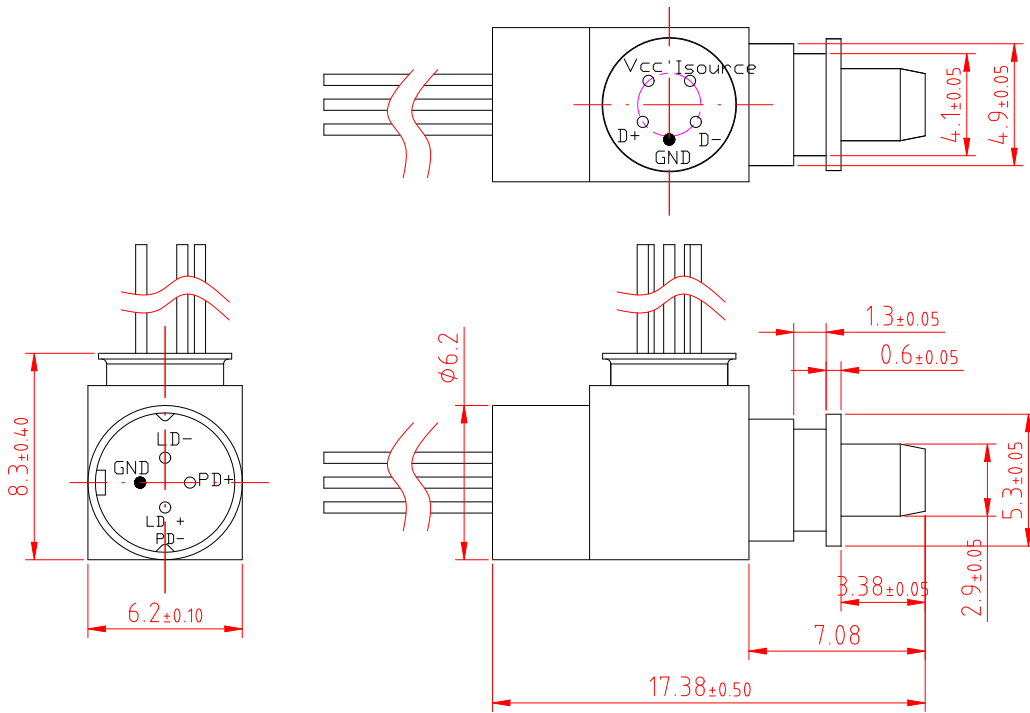
### Receiver Optical/Electrical Characteristics:

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	25	26	mA
Operating Wavelength	$\lambda_c$	--	$\lambda_c-20$	$\lambda_c$	$\lambda_c+20$	nm
Sensitivity	Sen	1.25G, BER=10 <sup>-10</sup>	--	-29	-27.5	dBm
Overload	OL	PRBS7, ER=10dB	0	--	--	dBm
Optical Crosstalk	Xtalk	--	--	-40	--	dB

Note:  $\lambda_c=1490\text{nm}; 1550\text{nm}$ .

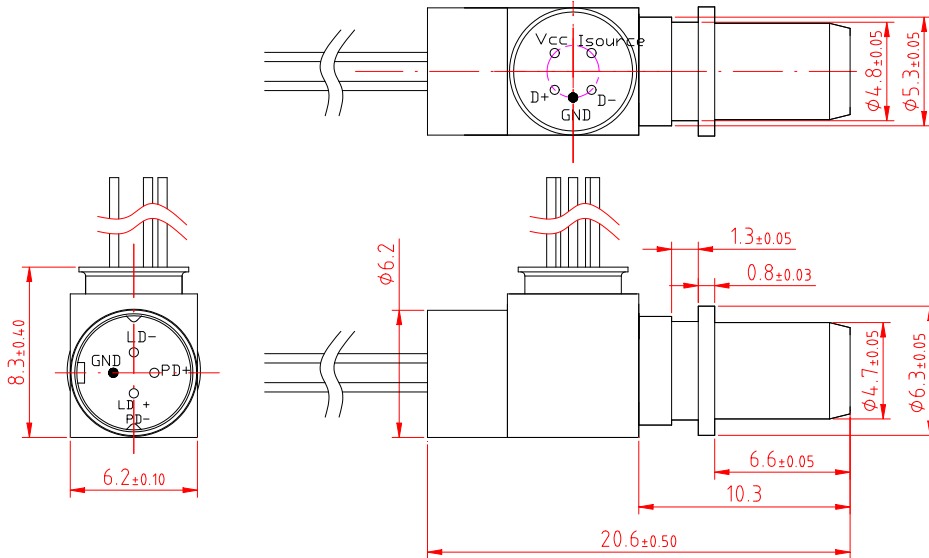
### Outline Dimension and PIN Definitions:

#### LC Receptacle

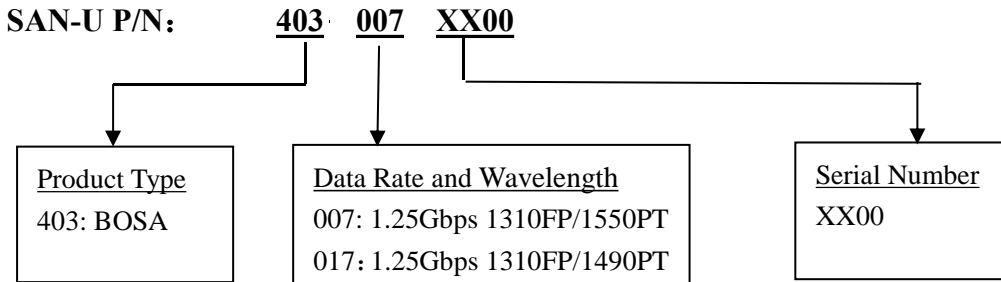




SC Receptacle



Order Information:



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