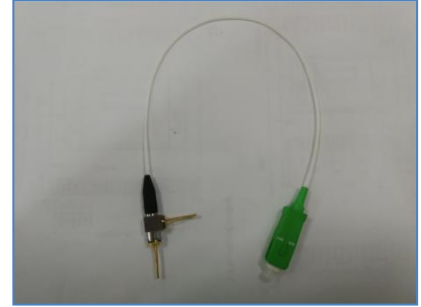


Bi-directional Optical Sub Assembly

Features:

Designed for short or long reach application
InGaAs Photodiode
Integrated 1610/1550nm WDM for a single fiber
MQW DFB 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
Reverse Voltage (MPD)	$V_{r(MPD)}$	--	10	V
Input optical power	P_{in}	--	3	dBm
Operating Temperature	T_{op}	-20	85	°C
Storage Temperature	T_{stg}	-40	100	°C
Lead Solder Temperature	--	--	260	°C
Lead Soldering Time	--	--	2	s

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

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Threshold Current	I_{th}	25°C	--	12	20	mA
Forward Voltage	V_f	$I_{op}=I_{th}+20mA$	--	1.1	1.6	V
Monitor Current(MPD)	I_m	$I_{op}=I_{th}+20mA$	100	--	1000	uA
Dark Current(MPD)	I_d	$V_r=5V$	--	--	200	nA
Optical Output Power	P_o	$I_{op}=I_{th}+20mA$	1.0	--	3.2	mW
Slope Efficiency	SE	$I_{op}=I_{th}+20mA$	0.05	--	0.16	W/A
Central Wavelength		$I_{op}=I_{th}+20mA$	1607	1610	1613	nm
Spectral Width (-20dB)		$I_{op}=I_{th}+20mA$	--	--	1	nm
Side-mode Suppression Ratio	SMSR	$I_{op}=I_{th}+20mA$	30	--	--	dB
Optical Isolation	ISO	--	30	--	--	dB

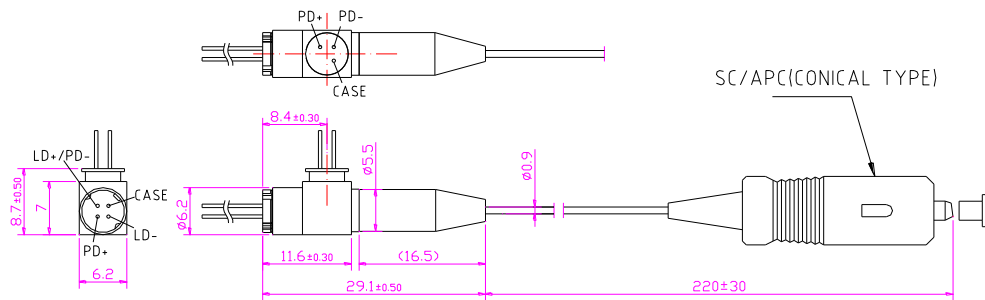
Receiver Optical/Electrical Characteristics

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Responsivity	Res	1550nm	0.8	0.85	--	A/W
Dark Current	Id	--	--	--	2	nA
Optical Return Loss	ORL	1550nm	--	--	-40	dB
Operating Wavelength		--	1525	1550	1565	nm

Optical Connector & Pigtail Characteristics

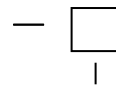
Parameter	Specifications	Remarks
Optical Port	Connector	SC/APC
	Fiber Color	white
	Fiber Length	22cm±3cm
	Fiber	SMF

Mechanical Dimension and Pin Assignment:



Order Information:

BOSA 2.5G 1610nm DFB-1550PD



<u>Fiber Length</u>
1m:1.0±0.1m
2m:2.0±0.1m
....

