



## 产品描述

- 该产品为上行 1270nm 波长工作速率 10.3125Gbps、下行 1577nm 工作速率 10G 的 ONU BOSA
- 发端采用 DFB 激光器，收端采用 APD-TIA 二极管
- 芯片信息：  
LD: 1270nm 103125Gpbs DFB 4PIN  
PT: 10.3125Gpbs APD-TIA
- 产品结构备注：SC/PC 插芯套组件，机加工/粉末件结构，接收端胶结结构，带隔离器

## 产品应用

- 远程通讯
- 点对点通讯

## XGSPON 对称 ONU BOSA

(F.L=7.5&10.2 Aspheric lens, 电绝缘)

## 产品特点

- 采用激光焊接方案
- 点对点应用
- 高光学隔离
- 工作温度：0°C ~ 70°C
- 插拔式 SC BOSA

## 产品标准

- 符合 Telcordia GR - 468 可靠性测试标准
- 符合 RoHS 6 项 标准
- 符合 ROHS(对有害物质的限制)标准
- 符合 GR - 326 连接器合格标准

## 1. Absolute Maximum Ratings

Item	Symbol	Unit	Min	Max	Note
Storage Temperature	T <sub>STG</sub>	°C	-40	+85	
Operating Temperature (ambient)	T <sub>OPR</sub>	°C	0	+70	
Supply Voltage	V <sub>CC</sub>	V	-0.5	4.5	
Lead Soldering Temperature (Max10 sec)	T <sub>S</sub>	°C	---	260	
Forward Current (LD)	I <sub>FLD</sub>	mA	---	150	
Reverse Voltage (LD)	V <sub>RLD</sub>	V	---	2	
Forward Current (MPD)	I <sub>FMPD</sub>	mA	---	2	
Reverse Voltage (MPD)	V <sub>RMPD</sub>	V	---	20	
Forward Current (PD)	I <sub>FPD</sub>	mA	---	10	
Reverse Voltage (PD)	V <sub>RPD</sub>	V	---	20	

## 2. Transmitter Electro-Optical Characteristics (TC=25°C, CW)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Threshold Current	I <sub>TH</sub>	TC=25°C	---	--	15	mA
		TC= -40~+85°C,	---	--	40	
Forward Voltage	V <sub>F</sub>	PF=PF (Min), TC =25°C	---	---	1.5	V
Optical Output power	P <sub>f</sub>	CW, @I <sub>TH</sub> +20mA, 25°C, kink free	3.0	---	---	mW
Optical Output power	P <sub>f</sub>	CW, @I <sub>TH</sub> +20mA,-40~ 85°C	1.8			mW
Optical Output power	P <sub>f</sub>	或依据客户需求				mW
Center Wavelength	λC	CW, TC=0°C ~ 70°C°C,TX;1270nm	1260	1270	1280	nm
Monitor Current	I <sub>M</sub>	CW,Pf=I <sub>th</sub> +20mA, VRMPD=1.5V, Tc=25C,	100	---	900	uA
Tracking Error	ΔP <sub>f</sub> /P <sub>f</sub>	0°C ~ 70°C, CW, Pf (I <sub>th</sub> +20mA)@IM hold	-1.5	---	+1.5	dB

### 3. Receiver Electro-Optical Characteristics (TC=25°C, Vcc=3.3V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Supply Current	ICC	依据TO 选型, 范围会不一样	---	---	---	mA
Operation Wavelength	λ	RX:1577nm	1575	1577	1580	nm
Saturation Power	P <sub>SAT</sub>	Tc=-0°C ~ 70°C(Test at 10.3125Gbps PRBS31 ER=6dB BER<10E-3)	-8	---	---	dBm
Sensitivity	Sen	Tc=0°C ~ 70°C (Test at 10.31252Gbps PRBS31 ER=6dB BER<10E-3)	---	---	-30	dBm
Optical Return Loss	ORL	λ=1577nm	20	---	---	dB
Optical Crosstalk	XTALK	1270nm/1577nm	40	---	---	dB

### 4. Dimension Outline

