



产品描述

- 该产品为上行 1310/1270nm 波长/工作速率 10.3125Gb/s、下行 1270/1330nm/工作速率 10.3125Gb/s 的点对点 BOSA 组件
- 发端采用 DFB 激光器,收端采用 PIN-TIA 二极管
- 芯片信息:
 - LD: 1270nm/1330nm 10.3125Gpbs DFB 4PIN
 - PT: 10.3125Gpbs PIN-TIA
- 产品结构备注: SC/PC 插芯套组件,机加工/粉末件结构,接收端耦合结构,带隔离器

产品应用

- 远程通讯
- 点对点通讯

10.3125Gbps BIDI-BOSA

20km/40km/60km

产品特点

- 采用激光焊接方案
- 点对点应用
- 上行下行速率均为 10.3125G
- 高光学隔离
- 工作温度: -40°C~85°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
- Compliant the MIL-STD-883E符合 MIL-STD-883E 标准

1. Absolute Maximum Ratings

Item	Symbol	Unit	Min	Max	Note
Storage Temperature	T _{STG}	°C	-40	+85	
Operating Temperature (ambient)	T _{OPR}	°C	-40	+85	
Supply Voltage	V _{CC}	V	-0.5	4.5	
Lead Soldering Temperature (Max10 sec)	T _S	°C	---	260	
Forward Current (LD)	I _{FLD}	mA	---	120	
Reverse Voltage (LD)	V _{RLD}	V	---	2	
Forward Current (MPD)	I _{FMPD}	mA	---	2	
Reverse Voltage (MPD)	V _{RMPD}	V	---	15	
Forward Current (PD)	I _{FDP}	mA	---	10	
Reverse Voltage (PD)	V _{RDP}	V	---	20	

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

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Threshold Current	ITH	TC=25°C	---	-	12	mA
		TC= -40~+85°C,	---	-	40	
Forward Voltage	VF	PF=PF (Min), TC =25°C	---	1.2	1.5	V
Optical Output power @20KM	Pf	CW, @ITH+20mA, 25°C, kink free	0.8	1.2	2	mW
Optical Output power @20KM	Pf	CW, @ITH+20mA, -40~ 85°C	0.5			mW
Optical Output power @40KM	Pf	CW, @ITH+20mA, 25°C, kink free	1.6	2	3.2	mW
Optical Output power @40KM	Pf	CW, @ITH+20mA, -40~85°C	1.0			mW
Optical Output power @60KM	Pf	CW, @ITH+20mA, 25°C, kink free	1.6		3.2	mW
Optical Output power @60KM	Pf	CW, @ITH+20mA, -40~85°C	1.0			mW

Center Wavelength	λ_C	CW, TC=-40~85°C, TX;1270nm	1260	1270	1280	nm
		CW, TC=-40~85°C, TX;1330nm	1320	1330	1340	nm
Monitor Current	IM	CW, Pf=Ith+20mA, VRMPD=1.5V, Tc=25C,	100	---	900	uA
Optical Return Loss tolerance	ORLT	Tested at 1270nm/1330nm	---	---	12	dB
Tracking Error	$\Delta Pf/Pf$	-40~+85°C, CW, Pf (Ith+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:1330nm	1320	1330	1340	nm
		RX:1270nm	1260	1270	1280	nm
Saturation Power PIN-TIA	PSAT	Tc=-40~85°C (Test at 10.3125Gbps PRBS31 ER=4dB BER<10E-12)	0.5	---	---	dBm
Saturation Power APD-TIA	PSAT	Tc=-40~85°C (Test at 10.3125Gbps PRBS31 ER=4dB BER<10E-12)	-7	---	---	dBm
Sensitivity @PIN-TIA	Sen	Tc=-40~85°C (Test at 10.3125Gbps PRBS31 ER=6dB BER<10E-12)	---	---	-15.5	dBm
Sensitivity @APD-TIA	Sen	Tc=-40~85°C (Test at 10.3125Gbps PRBS31 ER=6dB BER<10E-12)	---	---	-22	dBm
Optical Return Loss	ORL	$\lambda=1270\text{nm}$ or 1330nm	20	---	---	dB
Optical Crosstalk	XTALK	Tc=-40~85°C (Test at 10.3125Gbps PRBS31 ER=4dB BER<10E-12)	40	---	---	dB

4. Dimension Outline

