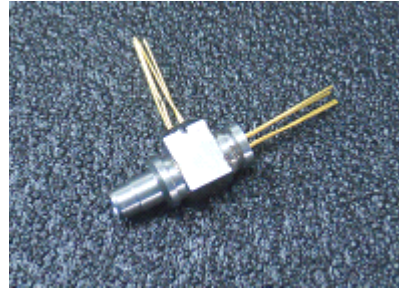


**T1310FP/R1490nm 1.25G SC BOSA**

**FB-34453ASS-00**

**Features:**

High stability FP laser chip  
InGaAs/InP PIN detector with TIA  
Operate temperature from -40°C to +85°C  
SC Receptacle



**Absolute Maximum Ratings**

Parameter	Symbol	Condition	Min	Max	Unit
Operating Case Temperature	T <sub>c</sub>	--	-40	85	°C
Storage Temperature	T <sub>stg</sub>	--	-40	85	°C
Lead solder Temperature	--	--		260	°C
Lead Soldering Time	--	--		10	s

**Optical/Electrical Characteristics (T=25°C, unless otherwise stated)**

**1310nm FP Laser Transmitter**

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Optical Output Power	P <sub>o</sub>	1.5	--	4.0	mW	CW, I <sub>op</sub> =30mA
Threshold Current	I <sub>th</sub>	--	10	15	mA	T=25 °C
Forward Voltage	V <sub>F</sub>	--	1.1	1.6	V	
Operating Current	I <sub>op</sub>	--	30	35	mA	CW, T=25 °C
Center Wavelength	λ <sub>c</sub>	1290	1310	1330	nm	CW, T=25 °C
Spectral Width (-20 dB)	Δλ	--	--	4	nm	
Rise/Fall Times	t <sub>R</sub> , t <sub>F</sub>	--	--	0.2	ns	20% to 80%
Monitor Current	I <sub>mon</sub>	100	--	800	μA	V <sub>R</sub> =5 V,
Monitor Dark Current	I <sub>D</sub>	--	--	0.1	uA	V <sub>R</sub> =5 V

**1490nm 1.25Gbps Receiver**

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Supply Voltage	VCC	3.0	3.3	3.6	V	
Supply Current	ICC	-	30	40	mA	No loads
Differential responsivity	R <sub>d</sub>	9.6	--	32	mV/uW	R <sub>load</sub> =100 Ω, λ=1490nm, P= -24dBm
Single ended responsivity	R <sub>s</sub>	4.8	--	16	mV/uW	R <sub>load</sub> =50 Ω, λ=1490nm, P= -24dBm
Small-Signal Bandwidth	Bw	700	-	-	MHZ	λ = 1490 nm, Pf=10uW
Low-Frequency Cut off	LF	--	--	115	KHZ	
Rise /Fall Time(20%~80%)	Tr/f		300	400	ps	λ = 1490 nm, P= -24dBm
Saturation Power	Psat	0			dBm	λ=1490nm
Wavelength	λ	1450	1490	1510	nm	
Single ended output impedance	R <sub>o</sub>	35	50	65	ohm	
Sensitivity		--	--	-24	dBm	λ = 1490 nm, 1.25Gbps, PRBS7, ER=10dB, BER=1E-10

Dimensions And Package Outline

