

T1550FP/R1310nm 155M SC BOSA

FB-53223ASS-00

Features:

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



Specification:

Absolute Maximum Ratings

Parameter	Symbol	Condition	Min	Max	Unit
Operating Case Temperature	T_c	--	-40	85	°C
Storage Temperature	T_{stg}	--	-40	85	°C
Lead solder Temperature	--	--		260	°C
Lead Soldering Time	--	--		10	s

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

1550nm FP Laser Transmitter

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Optical Output Power	P_o	0.1	--	0.5	mW	CW, $I_{op}=30mA$
Threshold Current	I_{th}	--	10	15	mA	$T=25\text{ }^\circ\text{C}$
Forward Voltage	V_F	--	1.1	1.6	V	
Operating Current	I_{op}	--	30	43	mA	CW, $T=25\text{ }^\circ\text{C}$
Center Wavelength	λ_c	1530	1550	1570	nm	CW, $T=25\text{ }^\circ\text{C}$
Spectral Width (-20 dB)	$\Delta\lambda$	--	--	4	nm	
Rise/Fall Times	t_R, t_F	--	--	0.2	ns	20% to 80%
Monitor Current	I_{mon}	100	--	800	μA	$V_R=5\text{ V}$,
Monitor Dark Current	I_D	--	--	0.1	μA	$V_R=5\text{ V}$

1310nm 155Mbps Receiver

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Supply Voltage	VCC	3.0	-	5.5	V	
Supply Current	ICC	-	-	35	mA	No loads
Differential responsivity	R_d	0.1	--	120	mV/uW	$R_{load}=100\ \Omega$, $\lambda=1310nm$
Single ended responsivity	R_s	0.05	--	60	mV/uW	$R_{load}=50\ \Omega$, $\lambda=1310nm$
Small-Signal Bandwidth	Bw	115	-	-	MHZ	$\lambda = 1310\text{ nm}$, $P_f=10\mu W$
Rise /Fall Time (20%~80%)	T_r/f		-	4.5	ns	$\lambda = 1310\text{ nm}$, $P_f=10\mu W$
Saturation Power	P_{sat}	-3			dBm	$\lambda=1310nm$
Wavelength	λ	1250	1310	1390	nm	
Single ended output impedance	R_o	--	50	--	ohm	
Sensitivity			-36	-34	dBm	$\lambda = 1310\text{ nm}$, 155Mbps, BER=1E-10

Dimensions And Package Outline

