

BU-GU3448-20C

2.5G SC/UPC BOSA T13DFB/R14 GPON

General Specification

- 1310nm DFB LD
- InGaAs PIN- TIA Receiver With a1490nm WDM Filter
- Bitrate: 2.5Gb/s
- Connector Type: SC/UPC Pigtail
- High Sensitivity
- Operation Temperature From -5°C to +75°C
- Optical Isolation>30dB,Cross Talk<-40dB
- RoHS compliant Products Available

Absolute Maximum Ratings

Table 1: Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	T _{STG}	-40	+85	°C
Operating Temperature (ambient)	T _{OPR}	-5	+75	°C
Supply Voltage	V _{CC}		5	V
Lead Soldering Temperature (Max10 sec)	T _S	---	260	°C
Forward Current (LD)	I _{FLD}	---	150	mA
Reverse Voltage (LD)	V _{RLD}	---	2	V
Forward Current (MPD)	I _{FMPD}	---	2	mA
Reverse Voltage (MPD)	V _{RMPD}	---	20	V
Forward Current (PD)	I _{FDP}	---	2	mA
Reverse Voltage (PD)	V _{RDP}	---	20	V
LD To-canPull Force		30		Kgf
PD To-canPull Force		15		Kgf

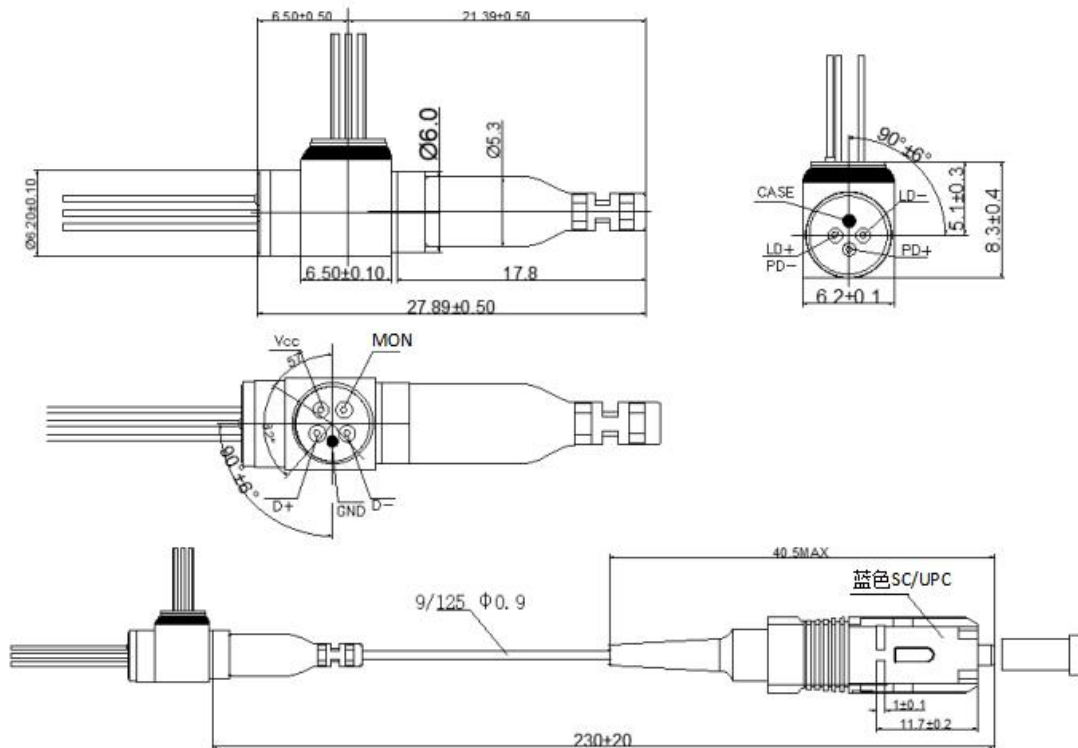
Electric and Optical Characteristics

Test Condition: $\lambda_c=CW$, $V_{CC}=+2.97V\sim+3.63V$, $T_c= -5\sim+75^\circ C$, unless otherwise noted

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Transmitter						
Threshold Current	I_{TH}	3	---	15	mA	$T_c=25^\circ C$
		---	---	40		$T_c= -5\sim+75^\circ C$,
Forward Voltage	V_F	---	---	1.6	V	$P_F=P_F$ (Min), $T_c=25^\circ C$
Optical Output power	P_f	0.6	---	1.2	mW	CW, @Ith+20mA, $25^\circ C$
Center Wavelength	λ_c	1290	---	1330	nm	CW, $T_c=-5\sim75^\circ C$
Spectral Width (-20dB)	$\Delta\lambda$	---	---	1	nm	CW, @Ith+20mA, $T_c=-5\sim75^\circ C$
Side-mode suppression ratio	SMSR	30	---	---	dB	$T_c=-5\sim75^\circ C$
Rise/Fall Time	T_R/T_F	---	---	260	ps	$P_F=0.6mW$, Extinction Ratio > 10dB, 20%-80%, without filter
Monitor Current	I_m	100	---	1000	uA	CW, @Ith+20mA, $V_{RMPD}=1.5V$, $T_c=25^\circ C$,
Tracking Error	$\Delta P_f/P_f$	-1.5	---	+1.5	dB	$-5\sim+75^\circ C$, CW, P_f (Ith+20mA)@Im hold
Receiver						
Supply Voltage	V_{CC}	2.97	3.3	3.6	V	
Supply Current	I_{cc}	---	39	45	mA	No Load
Optical Wavelength	λ	1470	1490	1510	nm	
Sensitivity	Sens	---	---	-29	dBm	2.5Gbps, RBS2 ²³ -1 BER=10 ⁻¹⁰ , ER=9dB
Saturation Power	P_{sat}	-3	---	---	dBm	
Output Resistance	R_{OUT}	25	---	60	Ω	Single Ended
Upper -3dB Bandwidth	BW	---	1.4	---	GHz	
Dark current of RSSI	I_d			200	nA	$V_{PD}=3.3V$ $T_c=-5\sim+75^\circ C$
Optical Crosstalk	X_{TALK}	---	---	-40	dB	1310nm/1490nm
ESD Requirement	ESD	500	---	---	V	

Mechanical& Pin description requirement

Unit:mm



Package dimension and pin assignment

For More Information

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