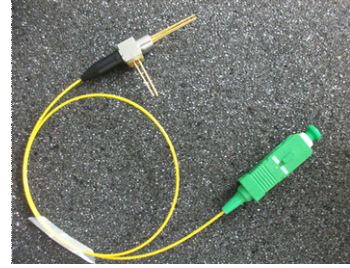


T1610DFB/R1550nm Analog Pigtail BOSA (Built-in Isolator)

FB-Z56F3ANx-00

Features:

With 1610nm DFB transmit suitable for Burst-Mode transmission
 1550nm analog PIN Photodiode
 For full-duplex communication over a single fiber.
 Built-in optical isolator
 Operate temperature from -40°C to +85°C
 SC&FC&LC pigtail connector



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)

1610nm DFB Laser Transmitter

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Optical Output Power	P_o	1.0	--	3.0	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	40	mA	CW, $T=25\text{ }^\circ\text{C}$
Center Wavelength	λ_c	1590	1610	1630	nm	CW, $T=25\text{ }^\circ\text{C}$
Spectral Width (-20 dB)	$\Delta\lambda$	--	0.1	1.0	nm	
Wavelength temperature coefficient	$\Delta\lambda/\Delta T$		0.08	0.12	nm/°C	
Side-Mode Suppression Ratio	SMSR	35	40		dB	$I_{op}=30mA$
Isolator		35			dB	
Relaxation Oscillation Frequency	f_R	--	4.5	--	GHZ	$I_{op}=30mA$
Rise/Fall Times	t_R, t_F	--	--	0.1	ns	20% to 80%
Monitor Current	I_{mon}	100	--	1000	μA	$V_R=5\text{ V}$,
Monitor Dark Current	I_D	--	--	200	nA	$V_R=5\text{ V}$

1550nm analog PIN Receiver

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Input Wavelength	λ_{pd}	1540	1550	1560	nm	$T_c=25\text{ }^\circ\text{C}$
Responsivity	R	0.85	--	--	A/W	$\lambda=1550nm$
Capacitance	C_{pd}	--	--	0.8	pF	
Bandwidth	BW	--	2.5		GHZ	
Dark Current	I_d	--	--	5	nA	$V_r=12V$
Second Order Inter-Modulation	IMD2	--	--	-70	dBc	$\lambda=1550nm(*1), V_r=12V$

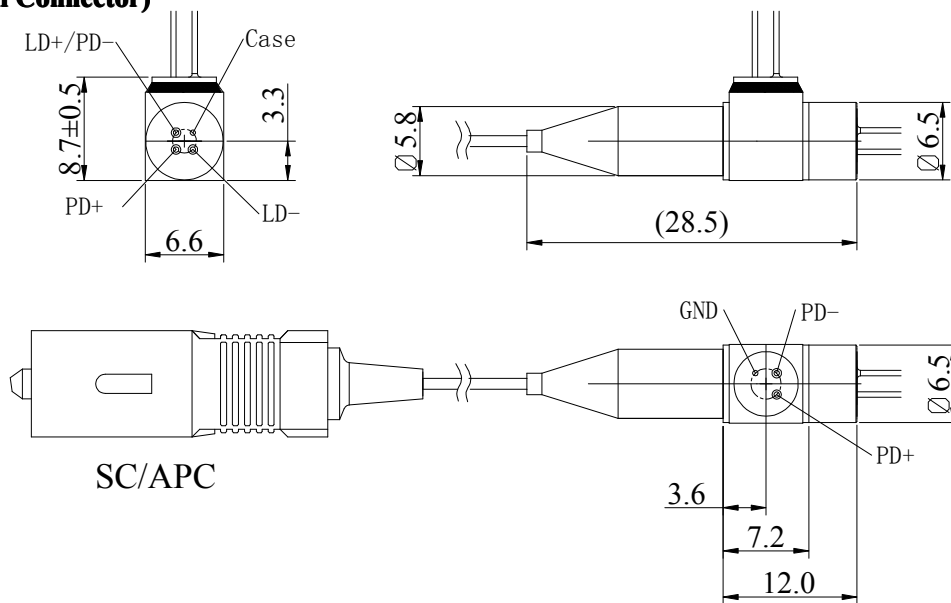
江苏飞格光电有限公司
JIANGSU FIBER GRID CO., LTD

Distortion						
Composite Triple Beat	IMD3	--	--	-70	dBc	$\lambda=1550\text{nm}(*1), V_r=12\text{V}$
Optical Return Loss	ORL	30	--	--	dB	$\lambda=1540\text{nm}\sim 1560\text{nm}$
Polarization Dependent Loss	PDL	--	--	0.5	dB	
Optical Isolation from External Source	ISO1	22	--	--	dB	$\lambda=1260\text{nm}\sim 1360\text{nm}$
	ISO2	31	--	--	dB	$\lambda=1480\text{nm}\sim 1500\text{nm}$
Optical Crosstalk from Internal LASER	Xopt	---	--	-30	dB	(*2)

Note: 1* Two tone two laser test($f_1=109.25\text{MHz}$, $f_2=349.25\text{MHz}$), OMI=40%, 0.5mW Per Laser

Note: 2* $X_{opt}=10 \times \log \{ (I_{xopt}/R)/P_f \}$, I_{xopt} is photo current at $P_f=3\text{dBm}$.

Dimensions And Package Outline
(SC/APC Pigtail Connector)



Order information

FB-Z56F3ANx-00

- Optical Connector: 1--SC/PC Pigtail
2-- SC/APC Pigtail
3--FC/PC Pigtail
4--FC/APC Pigtail
7--LC/PC Pigtail
8--LC/APC Pigtail