

YSB762DG3C-SC-S241

**10G 1270nm DFB LD/
10G 1577nm APD ONU PON**

Features:

- ◆ High-stability 1270nm DFB laser
- ◆ Built-in GaInAs/InP monitor photodiode
- ◆ Low threshold
- ◆ High reliability
- ◆ High sensitive 10.3125G APD+TIA
- ◆ SC Receptacle



Application:

- Optical communication system

Specification:

Transmitter Characteristics	Symbol	Test	Min	Typ	Max	Unit
Nominal bit rate	-	-	-	10.3125	-	Gb/s
Rated Output Power	Pout	CW,Iop=Ith+20mA,T=25°C	1.8	-	-	mW
Threshold Current	Ith	CW,T=25°C	-	-	10	mA
Center Wavelength	λ	CW,T=25°C	1260	1270	1280	nm
Spectral Width	$\Delta \lambda$	CW,T=25°C,-20dB	-	-	1	nm
Side Mode Suppression Ratio	SMSR	CW,T=25°C	35	-	-	dB
Tracking Error	TE	Iop=Ith+20mA,T=-40~85°C	-1.5	-	1.5	dB
Optical Isolation	ISO	-	30	-	-	dB
Monitor PD Current	Im	CW, Iop=Ith+20mA	50	-	1500	uA
Monitor PD Dark Current	Id	CW	-	-	100	nA
Operating Voltage	Vop	CW	-	1.1	1.6	V
Rise and Fall times	Tr/Tf	T=25°C,20%~80%	-	-	0.2	ns

Receiver Characteristics	Symbol	Test	Min	Typ	Max	Unit
Wavelength Range	λ	CW	1570	1577	1585	nm
Sensitivity	Sens	PRBS 2 ³¹ -1, 10.3125Gb/s, ER=9dB,BER=10 ⁻³ , Vop=Vbr*0.9	-	-	-29.5	dBm
Overload	P		-7	-	-	dBm
Breakdown Voltage	Vbr	I _D =10uA	20	-	50	V
Crosstalk	Xopt	-	-	-	-40	dB
Resistance	Z	-	40	50	60	Ω

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Add: A-2F, No. 5Rds Huashi Science Park, East Lake High-Tech Development

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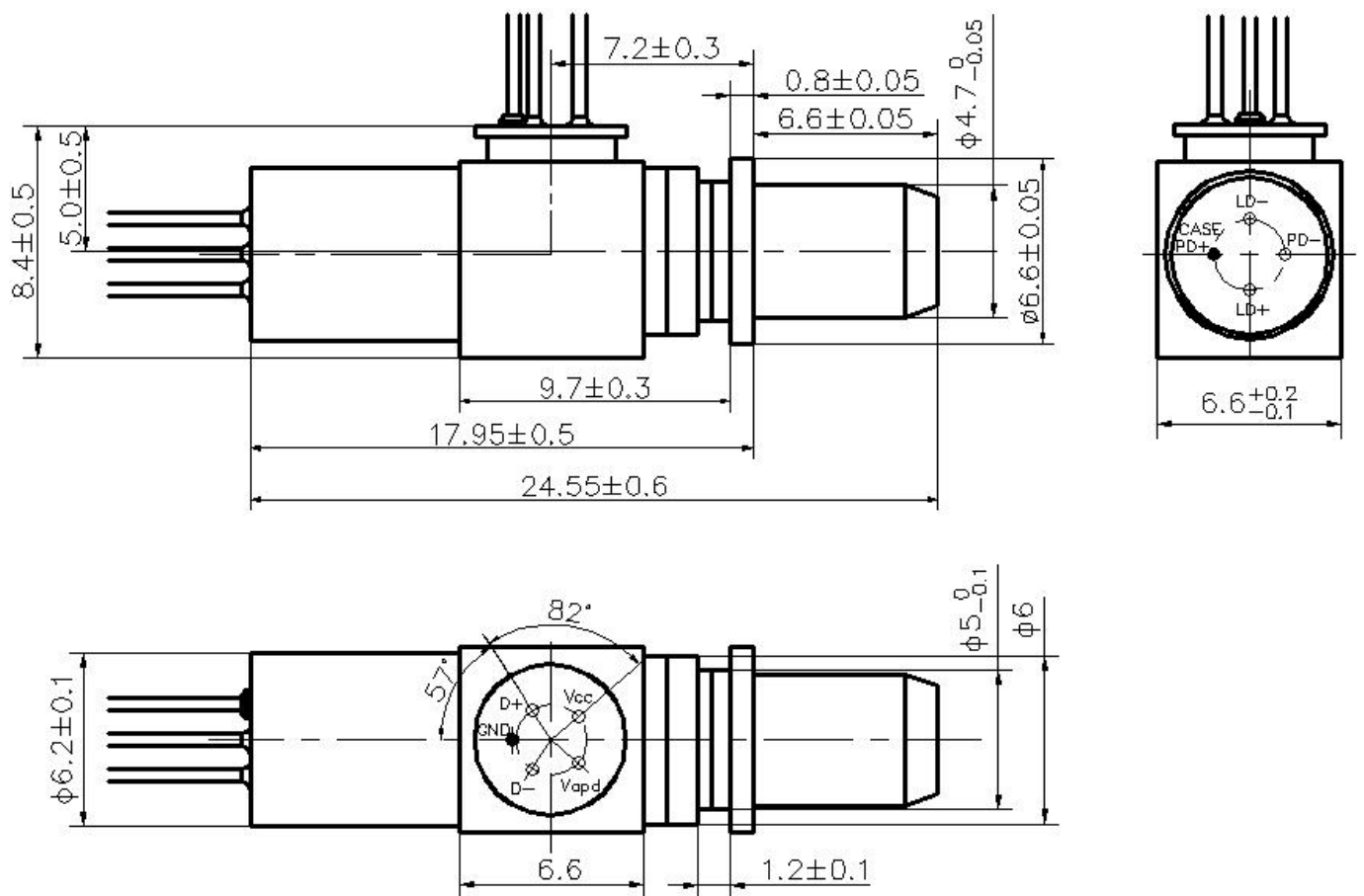
Tel: 027-67845125/6/7

Operating Voltage	Vcc	-	3.0	3.3	3.6	V
Operating Current	Icc	-	-	27	34	mA
Isolation	ISO	$\lambda = 1310/1490/1550\text{nm}$	30	-	-	dB

Absolute Maximum Ratings:

Parameter	Symbol	Value	Unit
Forward Current (LD)	$I_{F(LD)}$	120	mA
Reverse Voltage (LD)	$V_{R(LD)}$	2	V
Operating Current (PD)	$I_{F(PD)}$	2	mA
Reverse Voltage (PD)	$V_{R(PD)}$	20	V
Operating Temperature	T_{OP}	-40 ~ +85	°C
Storage Temperature	T_{ST}	-40 ~ +85	°C
Lead solder temperature /duration	-	260/10	°C/S

Dimensions:



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