

**YSB762D7C-SC-S241**

**2.5G 1270nm DFB LD/  
10G 1577nm APD ONU BOSA**

**Features:**

- ◆ High-stability 1270nm MQW-DFB laser
- ◆ Built-in GaInAs/InP monitor photodiode
- ◆ Low threshold
- ◆ High reliability
- ◆ High sensitive 10G APD+TIA
- ◆ SC Receptacle



**Application:**

- Optical communication system

**Specification:**

Transmitter Characteristics	Symbol	Test	Min	Typ	Max	Unit
Nominal bit rate	Gb/s	-	-	2.488	-	G
Rated Output Power	Pout	CW,Iop=Ith+20mA,T=25°C	2.4	-	-	mW
Threshold Current	Ith	CW,T=25°C	-	-	10	mA
Center Wavelength	$\lambda$	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	CW,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	$\lambda$	CW	1570	1577	1585	nm
Sensitivity	Sens	PRBS 2 <sup>31</sup> -1, 9.953Gb/s, ER=9dB, BER=10 <sup>-3</sup> ,Vop=Vbr*0.9	-	-	-29	dBm
Overload	P		-7	-	-	dBm
Responsivity	R	$\lambda = 1577\text{nm}$	0.6	-	-	A/W
Breakdown Voltage	Vbr	I <sub>D</sub> =10uA	20	-	50	V
Crosstalk	Xopt	-	-	-	-40	dB

Part NO: YSB762D7C-SC-S241

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

Zore, Wuhan, Hubei, China Web: www.ysod.com

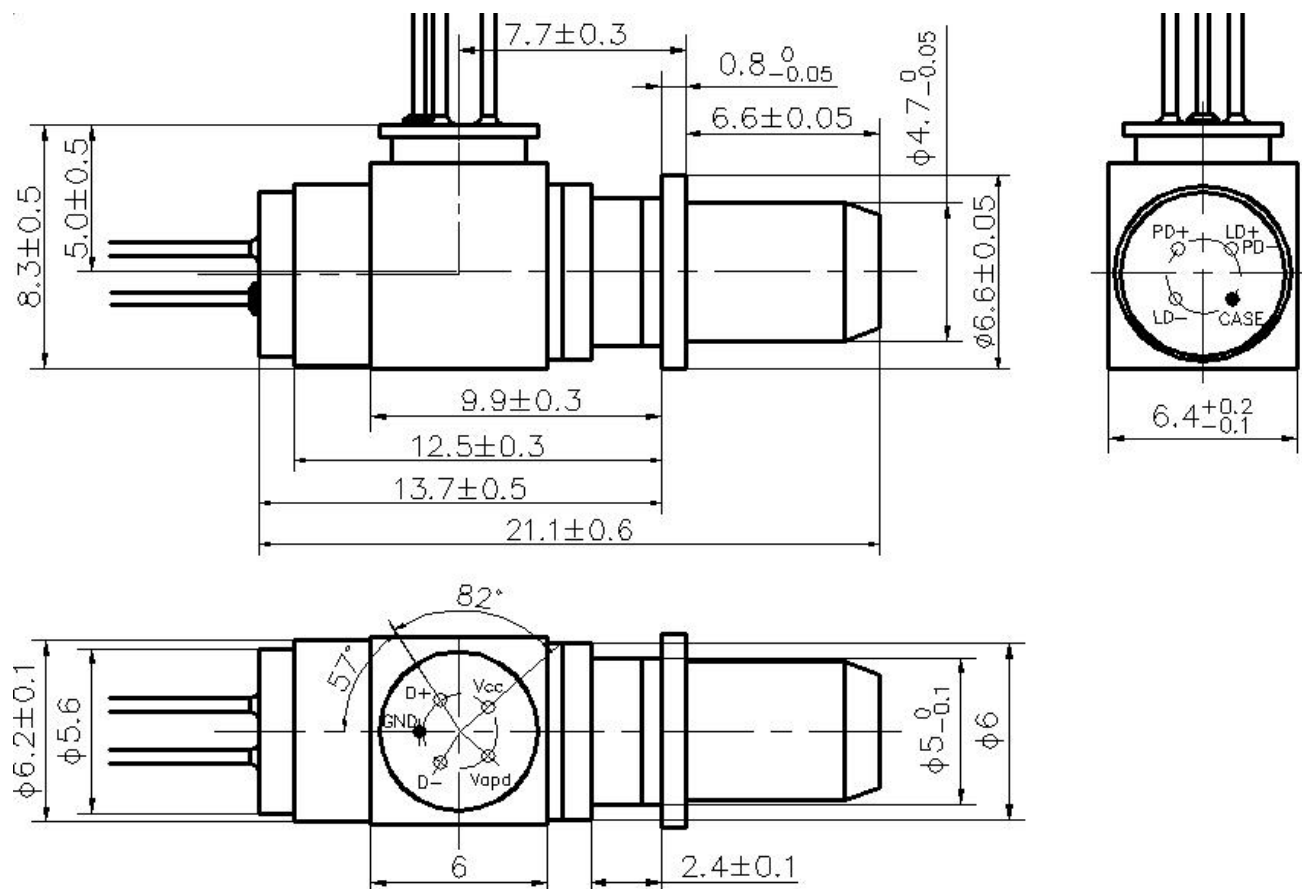
Tel: 027-67845125/6/7

Resistance	Z	-	40	50	60	Ω
Operating Voltage	Vcc	-	3.0	3.3	3.6	V
Operating Current	Icc	-	-	27	34	mA
Isolation	ISO	λ = 1310/1490/1550nm	30	-	-	dB

**Absolute Maximum Ratings:**

Parameter	Symbol	Value	Unit
Forward Current (LD)	I <sub>F(LD)</sub>	120	mA
Reverse Voltage (LD)	V <sub>R(LD)</sub>	2	V
Operating Current (PD)	I <sub>F(PD)</sub>	2	mA
Reverse Voltage (PD)	V <sub>R(PD)</sub>	20	V
Operating Temperature	T <sub>OP</sub>	-40 ~ +85	°C
Storage Temperature	T <sub>ST</sub>	-40 ~ +85	°C
Lead solder temperature /duration	-	260/10	°C/S

**Dimensions:**



Part NO: YSB762D7C-SC-S241

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

Zore, Wuhan, Hubei, China Web: www.ysod.com

Tel: 027-67845125/6/7