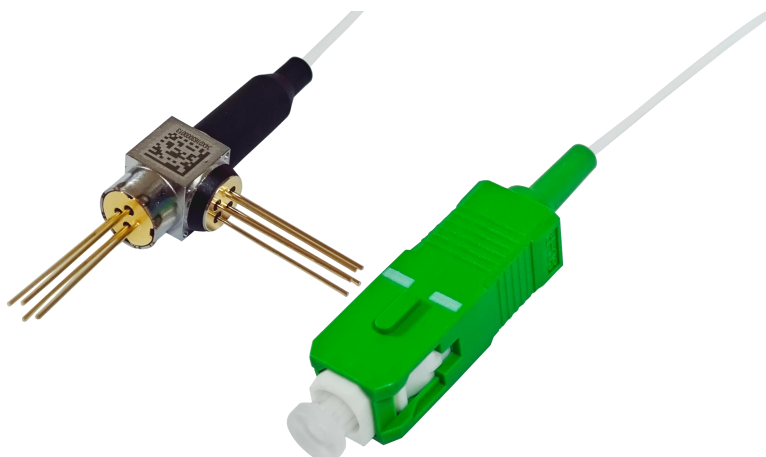


1.25G DFB 1310T/2.5G 1490R PIN-STIA SC/APC Pigtail

GPON ONU Laser

CL-LA-GPONU-SU-P



1. Absolute Maximum Ratings

Item	Unit	Min	Max	Note
Forward Current for LD	mA	--	100	
Reverse Voltage for LD	V	--	2	
Forward Current for MPD	mA	--	10	
Reverse Voltage for MPD	V	--	15	
TIA Supply Voltage	V	-0.4	4	
Operating Temp	°C	-10	85	
Storage Temperature	°C	-40	85	
Storage Relative Humidity	%	--	85	
Solder Reflow Temperature	°C	--	260	(*1)
ESD threshold	V	500		

(*1): Only for soldering by iron and 10 seconds on leads only

2. Transmitter Electro-Optical Characteristics (T_c=25°C, CW)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Threshold Current	I _{th}	25°C	--	9	15	mA
	I _{th}	85°C	--	--	45	mA

Optical Output Power (*2)	Pf	CW, If=Ith+20mA, 25 °C	1.4	--	3.5	mW
	Pf	CW, If=Ith+20mA, 85°C	0.9	--	--	mW
Forward Voltage	Vf	CW, If=Ith+20mA	--	--	2.0	V
Peak Wavelength	λ	CW, If=Ith+20mA, 25 °C	1300	1310	1320	nm
		CW, If=Ith+20mA, -10~85°C	1290	--	1330	nm
Side Mode Suppression Ratio	SMSR	CW, If=Ith+20mA	30	--	--	dB
Spectrum Width (-20dB)	$\Delta\lambda$	CW, If=Ith+20mA	--	--	1.0	nm
Monitor Current	Im	CW, If=Ith+20mA	100	--	1200	μ A
Monitor Dark Current	Id	Vrp=5V	--	--	100	nA
Tracking Error(*3)	TE	CW, Tc = -10~85°C	-1.5	--	1.5	dB

(*2): Launched into 9/125 μ m SMF

(*3): $\Delta Pf = 10 \times \log(Pf(Tc) / Pf(25^\circ C))$, Imhold@Pf=2mW, 25°C

3. Receiver Electro-Optical Characteristics (TC=25°C, Vcc=3.3V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Supply Voltage	Vcc	No loads	3.0	3.3	3.6	V
Supply Current	Icc	No loads	35	39	60	mA
Operating Wavelength	λ		1480	1490	1500	nm
Sensitivity	Sen	λ =1490nm, 2.5Gbps, PRBS23, ER=10dB, BER=1E-12, RL=50 Ω ,NRZ	--	--	-29.0	dBm
Overload	OL		-7.0	--	--	dBm
Dark Current	Id	Vcc=3.3V	--	--	100	nA
Optical Return Loss	ORL1310	1310nm	--	--	-12	dB
	ORL1490	1490nm	--	--	-20	dB
Optical Crosstalk	X talk	1310nm/1490nm	--	--	-40	dB
Optical Isolation From External Source	ISO1	λ = 1442~1450nm	25	--	--	dB
		λ = 1530~1538nm				
	ISO2	λ = 1260~1441nm	35	--	--	dB
		λ = 1539~1625nm				

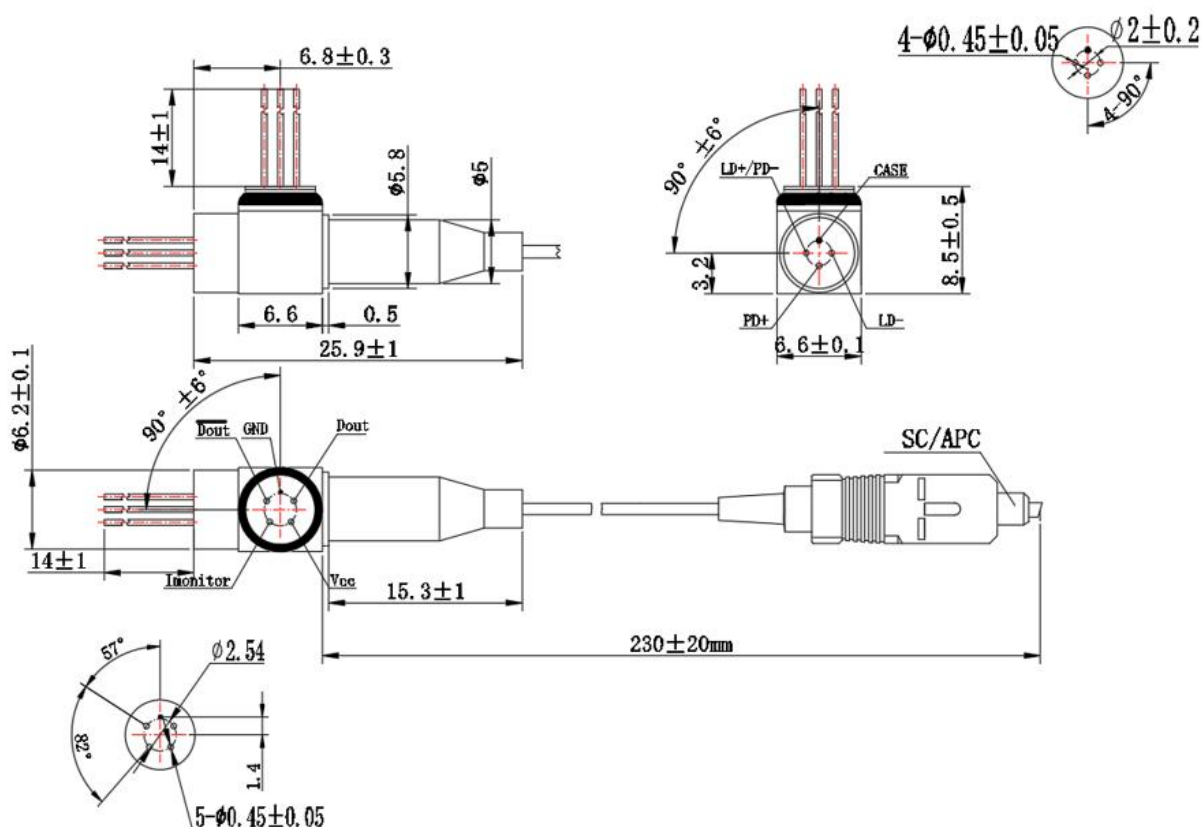
4. Key Materials

Parts Name	Vendor Name	Part No.	Note
LD TO-Chip	Sanan	S-DL02S31-001	
PD TO-Chip	Sanan	S-10BCPD10-G	TIA P/N:EOC1089

5. COMPONENT INFORMATION

Component Description	P/N	Vendor	Customer
GPON ONU	47103030432	Jiuzhou	

6. Dimension Outline



7. Pigtail Fiber Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Mode Field Diameter		8	9	10	μm	
Cladding Diameter		123	125	127	μm	
Optical Connector Insertion Loss		--	--	0.4	dB	SC/APC connector
Fiber Bending Radius		30	--	--	mm	
Fiber Diameter		0.8	0.9	1.0	mm	
Tension Force on Pigtail Fiber		5	--	--	N	