Epon ONU BOSA

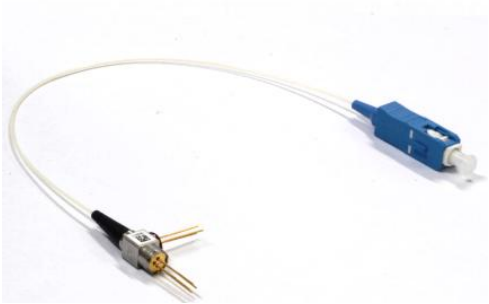
Features

Wide temperature range operation

High reliable

E-PON ONU Transceiver ITU-T G984.2 Class B+ compliant

SC-UPC pigtal



Applications

FTTX network

Absolute maximum ratings

Parameter	Symbol	Min	Max	Unit	Notes
Case Operating Temperature range	Tc	0	70	℃	Case temperature
Storage Temperature range	Ts	-40	85	℃	Ambient temperature
Laser Diode Reverse Voltage	VRL	-	2	V	
Laser Diode Forward Current	IFL	-	150	mA	
Monitor Diode Reverse Voltage	VRD	-	15	V	
Monitor Diode Forward Current	IFD	-	10	mA	
TIA Supply Voltage	Vcc	-	4.5	V	
Continuous Reverse Voltage	-	-	10	V	
Input optical power	P_{in}	-	-3	dBm	
Lead Solder Temperature/ Time	-	-	260/10	℃/s	
Relative Humidity	RH	-	85	%	

Transmitter Electrical and Optical Characteristics

Parameter	Symbol	Min	Typical	Max	Unit	Notes
Threshold Current	Ith	-	7.5	15	mA	CW, TC=25℃
		-	-	50		CW, TC=70℃
Operating Current	Iop	-	-	75	mA	CW,Pf=2mW, TC =0~+70℃
Fiber Output Power	Pf	1.2	-	1.8	mW	CW, Iop = Ith+20mA,Kink free, TC=25℃
		1.2	-	3.5		CW, Iop = Ith+20mA,Kink free, TC=85℃
Slope efficiency	Se	0.075	-	-	mW/mA	CW, Pf=2mW ,TC=25℃
		0.06	-	-		CW, Pf=2mW ,TC=70℃
Operating Voltage	Vop	-	1.1	1.5	V	CW, Pf=2mW,
Center Wavelength	λc	1305	-	1315	nm	CW, Iop = Ith+20mA,TC=25℃
		1300	-	1325		CW, Iop = Ith+20mA,TC=0~+70℃℃
Spectrum Width (RMS)	Δλ	-	-	1	nm	CW, Iop = Ith+20mA,TC=0~+70℃℃
Side Mode Suppression	SMSR	30	40	-	dB	CW, Iop = Ith+20mA,TC=25℃
Monitor Current	Imon	100	-	1000	μA	CW, Pf=2mW,VRMP=1V
Monitor Dark Current	Id	-	-	25	nA	Iop = Ith+20mA
Capacitance (MPD)	CPD	4	-	15	pF	VRMP=5V, f=1MHz
Tracking Error (CW)	TE	-1.5	-	+1.5	dB	CW, TC=0~+70℃℃, monitor current hold @ Ith + 20 mA, Tc =25℃

Receiver Electrical- Optical Characteristics

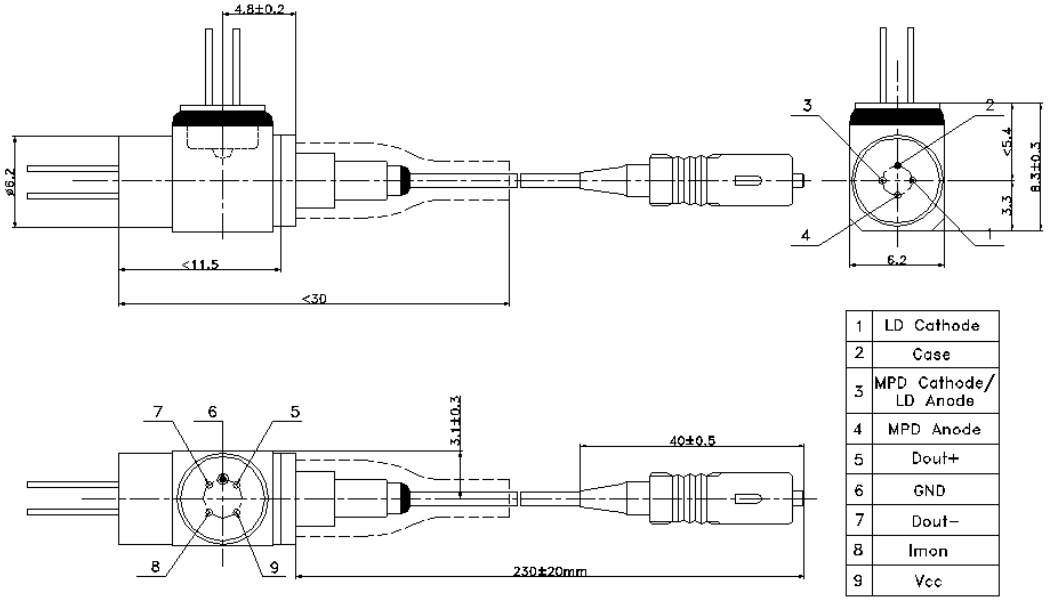
Table.4 Electrical- Optical Characteristics (Tc= 0° C- 70° C,Typical value at 25° C,Vcc=3.3V±5%)

Parameter	Symbol	Min	Typical	Max	Unit	Notes
Operating Wavelength	λ	1480	1490	1500	nm	-
Supply Voltage	Vcc	3.0	3.3	3.6	V	-
Circuit Current	Icc	15	-	40	mA	No load
Sensitivity	Sen.	-	-28.5	-29.5	dBm	λ=1490nm,DR=1.25Gbps,ER=10dB, NRZ, PRBS223-1,BER=10-10,
Saturation Power	Psat.	-5	-	-	dBm	-
Output Impedance	Ro	-	50	-	Ω	Single output

Other Characteristic-Optical，Electrical

Parameter	Symbol	Min	Typical	Max	Unit	Notes
Optical Crosstalk	CRT	-	-45	-40	dB	
Return Loss	RL	-	-	-12	dB	λ=1310nm
		-	-	-20	dB	λ=1490nm
Optical Isolation from External Source	Iso	25	-	-	dB	λ=1260~1360nm
		25	-	-	dB	λ= 1441nm~1450 nm, λ= 1530 nm~1539 nm
		36	-	-	dB	λ= 1400nm~1441 nm, λ= 1539 nm~1625 nm
Minimum Fiber bend radius		-	-	30	mm	
Exterior fiber diameter		0.8	0.9	1.0	mm	85° C max temperature
Fiber length	L	220	230	240	mm	230mm is also available
Housing retention force		25	-	-	kgf	Including all joint parts to the housing

Package Dimensions (Unit : mm)



1	LD Cathode
2	Case
3	MPD Cathode/ LD Anode
4	MPD Anode
5	Dout+
6	GND
7	Dout-
8	Imon
9	Vcc