



1550nm DFB Pigtailed Components(high power)

Features

- Built - in optical isolator
- Low capacitance and low dark current
- High stability of DFB lasers die
- Low threshold current , low operating current
- Integrated high isolation , low insertion loss



Applications

CATV Reverse Transmission

Other Analog or Digital Optical Transmission

Optical & Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Rated Power	Po	6	8	10	mW	Ith+40mA
Slope Efficiency	SE		0.15	0.2	mW/mA	
Threshold Current	Ith		10	15	mA	-
Operating Current	Iop		50	70	mA	
Forward Voltage Drop	Vop	-	1.0	1.2	V	CW, Ith+40mA
Cent Wavelength	λ_c	1540	1550	1560	nm	-
Spectrum Width(-3dB)	$\Delta\lambda$	-	0.5	1	nm	Ith+40mA
Side-mode Suppression Ratio	SMSR	35		-	dB	-
Bandwidth	Bw		2.5		GHz	
Monitor Current	Im	100		1200	uA	CW, Ith+40mA
Dark Current of Monitor	Id	-	-	100	nA	5V
Optical Isolation(Single stage)	ISO	35	40	-	dB	
Optical Isolation(Double stage)	ISO	45	50	-	dB	
Return loss	RL			-45	dB	
Analog Characteristic index						
Relative Intensity Noise	RIN	-	-155	-150	dB/Hz	-
RF Bandpass Flatness	BF		± 1.5		dB	
Third-order Distortion	IMD3	-	-55	-	dBc	
Carrier Noise Ratio	CNR	51	-	-	dB	Note 1
Composite Second Order	CSO	-	-	-57	dBc	
Composite Triple Beat	CTB	-	-	-65	dBc	

Note 1: ① If=Iop, Optical Modulation, Index=3.2%/channel (minimum),60 PAL-D unmodulated carries (47 to 550MHz), 10km singlemode fiber, -1dBm received power, Receiver responsivity=0.85A/W.

② If=Iop, Optical Modulation Index=3.2%/channel (minimum), CNR, CSO, CTB tested value at worst case over all test frequencies. NTSC 120ch., 10km singlemode fiber, -1dBm received power, Receiverresponsivity=0.85A/W

Absolute Maximum Ratings

Address: 5-floor,Block B Creative Building, Shaojia Tsui, Wenzhi St.,Hongshan District,Wuhan, City,Hubei,P.R.China 430074

Tel: 86-027-87172995

Fax: 86-027-87179709

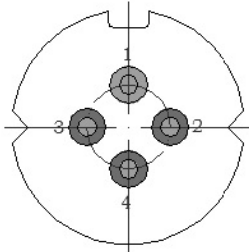
www.laserdiodedevice.com



Parameter	Symbol	Min.	Max.	Unit	Test Condition
Storage Temperature	T _{stg}	-40	100	°C	-
Operating Temperature	T _{op}	-40	85	°C	-
Forward Current(LD)	I _f (LD)		150	mA	CW
Reverse Voltage(LD)	V _r (PD)		2	V	
Forward Current(PD)	I _f (LD)		2	mA	CW
Reverse Voltage(PD)	V _r (PD)		15	V	
Soldering Temp	-	-	260	°C	-
Soldering Time	-	-	10	S	S

PIN Definition

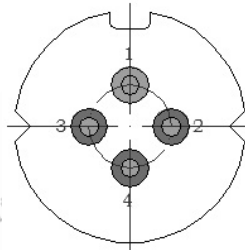
LD:



Type A:

- 【1】 LD +
- 【2】 LD -
- 【3】 PD +
- 【4】 PD -

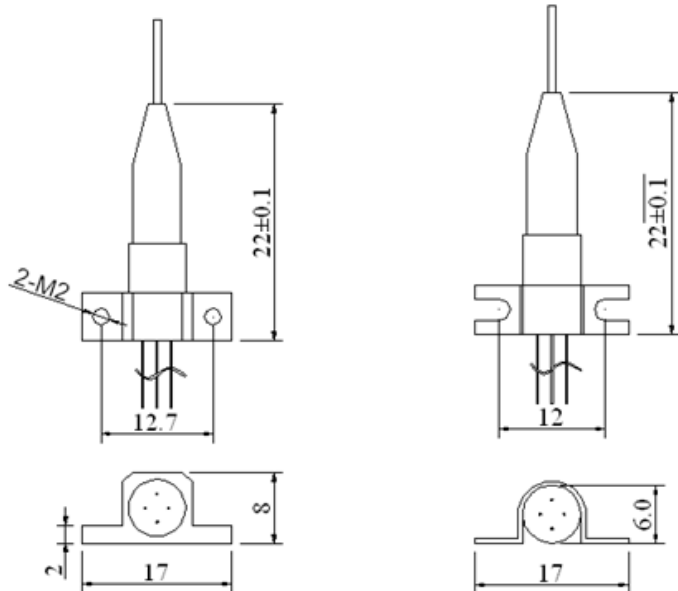
LD:



Type B:

- 【1】 CASE
- 【2】 LD -
- 【3】 LD+/PD-
- 【4】 PD +

Drawing



Order Information

MLD-D55X2-XXXX



M	LD	-D	55	X	2	-X	X	X	X
Mode	Product Type	Chip	Wavelength	Insolator	Bandwidth	Connector	Pin	Pigtail Length	Power Range
		D: DFB	55: 1550nm	S: Single W: Without	2: 2.5Gb/s	1: FC/APC 2: FC/PC 3: SC/APC 4: SC/PC 5: LC/PC 6: LC/APC W: Without	A: 725 B: 720	05: 0.5m 10: 1.0m	P6: >6mW P8: >8mW P10: >10mW

Additional requirements can be settled through friendly negotiation.

Shengshi Optical Tech. Co.,Ltd reserves the right to make changes to the product or information contained herein without notice.

Wuhan Shengshi Optical Technology Co.,Ltd

Wuhan Shengshi Optical Technology Co.,Ltd