

1102 Coaxial DFB Laser Diode

LD-1650-TO



1650 nm TO LD Laser Diode

The DFB TO56 lasers are uncooled semiconductor InAlGaAs laser working at 1650 nm wavelength. The device is delivered in hermetic TO56 package with integrated InGaAs photodiode for optical power monitoring. This high performance, and high reliability laser is suitable for applications up to 1.25 Gb/s in fiber optics links.

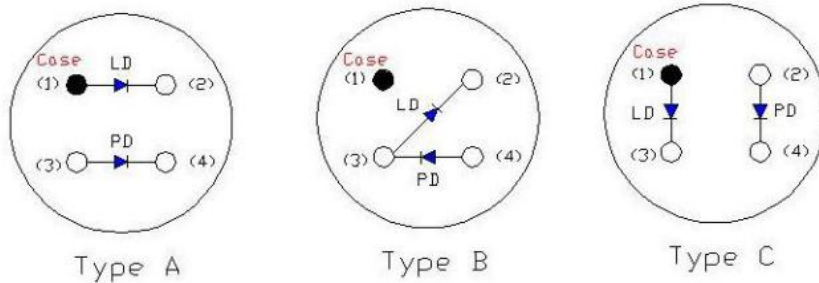
FEATURES

- 1650 nm typ. Emission Wavelength
- High Power over Wide Temperature Range
- High Side-mode-suppression Ratio (35 dB min.)
- High Reliability
- Multi-quantum Well (MQW) Active Layer
- Aspherical Lens TO Package

USE IN

- Telecommunication
- Data Communication
- GSM, CDMA, HFC

FUNCTIONAL DRAWING



Pin No.	Type A	Type B	Type C
1	LD Anode(Case)	Case	LD Anode(Case)
2	LD Cathode (+)	LD Cathode (+)	PD Anode(-)
3	PD Anode (-)	LD Anode/ PD Cathode (+)	LD Cathode(+)
4	PD Cathode (+)	PD Anode (-)	PD Cathode(+)

Order notes to our customers: The default parameters are as follows. For special needs, please contact sales.

1) Connector FC/APC, 900 um, 1 m by default for all devices except for high power devices.

2) Slow axis working, fast axis blocked, connector key is aligned to slow axis by default for PM devices.

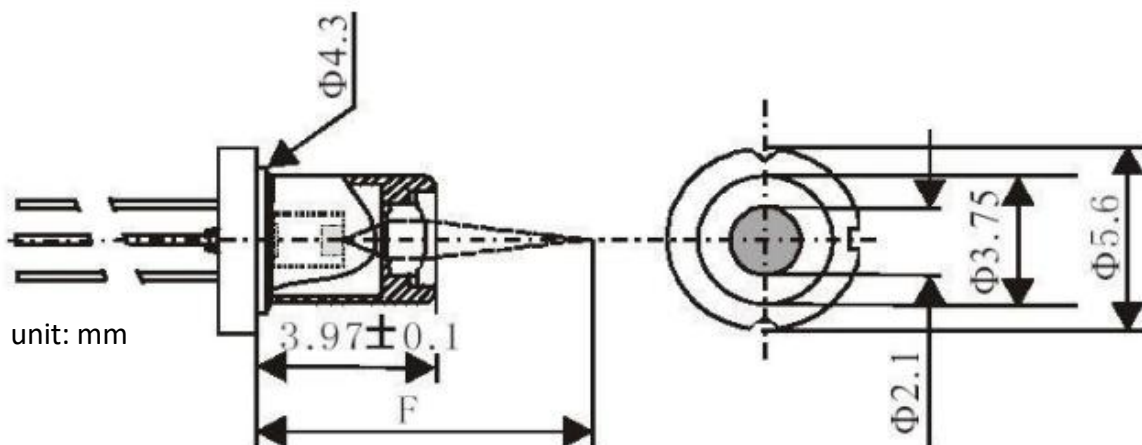
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LD-1650-T0



LD Reverse Voltage	CW	2 V max.
LD Forward Current	CW	120 mA max.
PD Reverse Voltage	CW	15 V max.
PD Forward Current	CW	2 mA max.
Operating Temperature	Case Temperature	-20 °C to +85 °C
Storage Temperature	Ambient Temperature	-40 °C to +85 °C
Center Wavelength	CW, $I_F = I_{TH} + 20$ mA	1645 nm min.; 1650 nm typ.; 1655 nm max.
Optical Output Power	CW, $I_F = I_{TH} + 20$ mA	5 mW min.
Threshold Current	CW	5 mA min.
Operating Voltage	CW, $I_F = I_{TH} + 20$ mA	1.2 V typ.; 1.5 V max.
Side-mode Suppression Ratio	CW, $I_F = I_{TH} + 20$ mA	35 dB min.; 40 dB typ.
Beam Divergence Angle (Parallel)	CW, $I_F = I_{TH} + 20$ mA	8 Deg max.
Beam Divergence Angle (Perpendicular)	CW, $I_F = I_{TH} + 20$ mA	13 Deg max.
Rise and Fall Time	$I_F = I_{TH}$, P_O , 10% to 90%	0.4 ns max.
PD Monitor Current	CW, $V_{RD} = 1$ V	0.1 mA min.; 1 mA max.
PD Capacitance	$V_{RD} = 10$ V, $f = 1$ MHz	10 pF typ.; 15 pF max.
Focus Length	Aspherical Lens Cap	7.2 mm min.; 7.5 mm typ.; 7.8 mm max.

MECHANICAL DRAWING



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