

## Coaxial Pigtail 1310nm/1550nm DFB LD



GLD200 series lasers are InGaAsP/InP MQW DFB laser diodes at either 1310nm or 1550nm wavelength for up to 3.2Gb/s transmission applications. The laser diode is mounted into a coaxial package integrated with an InGaAs monitor PD and a single mode 1-meter long 900um diameter fiber pigtail. This module has a single stage isolator integrated inside.

### Features:

- Uncooled 1310nm/1550nm DFB MQW Laser Diode
- Built-in InGaAs PD Monitor
- High-Speed Operation Up to 3.2Gbps
- Laser Welding Assembly Method
- High Reliability
- Complied with Telcordia GR-468
- Complied with RoHS

### Absolute maximum ratings

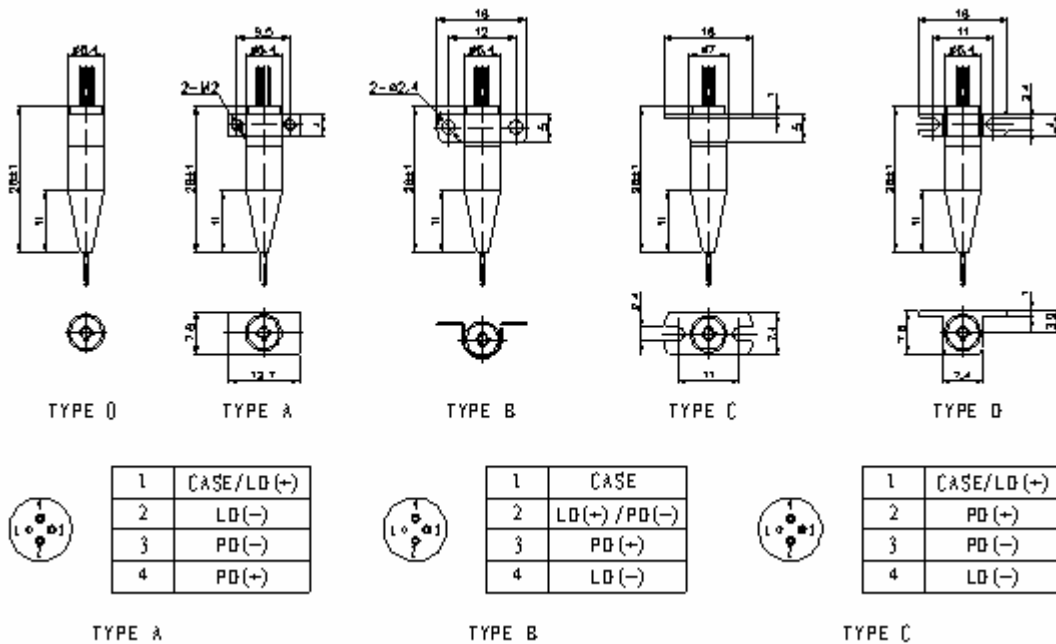
Parameter	Symbol	Ratings	Unit
Storage temperature	Tstg	-40~+85	°C
Operating case temperature	Top	-40~+85	°C
Fiber output power	Pf	4	mW
Reverse voltage (LD)	VrL	2	V
Reverse voltage (PD)	VrP	10	V
Reverse current (PD)	IrP	2	mA
Soldering temperature (<10s)	Stemp	260	°C

### Electrical and optical characteristics (Tc=+25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold current	Ith	CW	—	10	15	mA
Optical output power	Pf	CW, If=Ith+20mA	0.5	—	2.5	mW
Operating voltage	Vf	CW, If=Ith+20mA		1.15	1.5	V
Center Wavelength	$\lambda_c$	CW	1290	1310	1330	nm
			1530	1550	1570	
RMS Spectrum Width	$\Delta\lambda$	CW, If=Ith+20mA			1.0	nm

Side-mode suppression ratio	SMSR	CW, Tc=-0~+70°C	30	35	—	dB
Tracking error	Pf	Im hold (@pf=2mW(+25C)), CW, Tc=-0~+70°C	-1.5	—	1.5	dB
Rise time	tr	Ib=Ith, 20-80%, Tc=-0~+70°C	—	0.05	0.15	ns
Fall time	tf	Ib=Ith, 20-80%, Tc=-0~+70°C	—	0.10	0.15	ns
Extinction ratio	Er	10log(2mW/Pf(Ith)), Tc=-0~+70°C	10	—	—	dB
Monitor current	Im	CW, Vrp=5V, Tc=-0~+70°C	100	—		μA
Monitor dark current	Id	Vrp=5V	—		100	nA
Monitor capacitance	C	Vrp=5V, f=1MHz	—	10	20	pF

### Mechanical Dimension and Pin Assignment



Unit:mm

Tolerance: ±0.1mm, unless otherwise noted.

### Ordering Information

GLD2W0-X-Y-Z-D 3.2Gb/s Coaxial DFB Laser

W (Wavelength): 3\_1310nm, 5\_1550nm

X (Pigtail Output Power): 05\_0.5mW, 10\_1.0mW, 15\_1.5mW, 20\_2.0mW

Y (Data Rate): 1\_1.25Gb/s, 2\_2.5Gb/s, 3-3.2Gb/s

Z (Package Type): 0 or A or B or C or D

D (Pigtail Connector): SU\_SC/UPC, FU\_FC/UPC, SA\_SC/APC, FA\_FC/APC