

TOSHIBA LASER DIODE TOLD 80 D

TENTATIVE

Application

- Fiber optic transmission systems

FEATURES

- InGaAsP/InP buried-hetero structure
- Wavelength 1300nm
- High reliability MTF > 10⁵ hrs (50°C)
- Hermetically sealed package
- Power monitoring (Ge PD)
- Multimode Fiber Pigtail (40/125μm)
- High bit rate emitter
- Low cost type

ABSOLUTE MAXIMUM RATINGS (Tc=25°C)

ITEM	SYMBOL	RATINGS	UNITS
Storage Temperature	Tsig	-20~+70	°C
Operating Temperature	Tc	0°C~+60	°C
Forward Current	I _{FL}	150	mA
Reverse Voltage	V _{RL}	2	V
Fiber Output Power	P _{FL}	1.5	mW
PD Reverse Voltage	V _{RD} (PD)	15	V

★KINK FREE ≤ PFI

★T₀ ≥ 50K

★N_f(50°C) / N_f(25°C) ≥ 0.75

ELECTRICAL AND OPTICAL CHARACTERISTICS (Tc=25°C)

ITEM	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Threshold Current	I _{th}	CW	—	25	40	mA
Threshold Voltage	V _{th}	I _F = I _{th}	—	1	1.2	V
Forward Voltage	V _f	I _F = I _{th} + 20mA	—	1.2	1.5	V
Fiber Output Power	P _f	I _F = I _{th} + 20mA	0.8	1.2		mW
Rise Time	t _r	10-90%	—	0.5	1	ns
Fall Time	t _f	10-90%	—	0.5	1	ns
Peak Emission Wavelength	λ _p	P _f TYP	1290	1300	1310	nm
Spectral Radiation Bandwidth	Δλ	P _f TYP	—	3	6	nm
Monitoring Output Current	I _m	P _f TYP	0.1	0.4		mA
PD Dark Current	I _D	V _R = -5V	—	1	2	μA
PD Capacitance	C ₁	V _R = -5V, f = 1MHz	—	15		pF
PD Forward Bandwidth	f _{PD}	V _R = -5V	—	200		MHz

