TOSHIBA LASER DIODE
TOLD 80 F

TENTATIVE

Application

- Fiber optic transmission systems

FEATURES

- InGaAsP/InP buried-hetero structure
- Wavelength 1300nm
- High reliability MTTF > 10^5 hrs (50℃)
- Hermetically sealed package
- Power monitoring (Ge PD)
- MultiMode Fiber Pigtail (40/125μm)
- High bit rate emitter
- Low cost type

ABSOLUTE MAXIMUM RATINGS (Tc=25℃)

ITEM	SYMBOL	RATINGS	UNITS	
Storage Temperature	Tstg	-20～+70	℃	
Operating Temperature	Tc	0℃～+60	℃	
Forward Current	I_{FL}	150	mA	★KINK FREE≦Pf I
Reverse Voltage	V_{RL}	2	V	
Fiber Output Power	P_{FL}	1.5	mW	★To≧50K
PD Reverse Voltage	V_{RD}(PD)	15	V	★Nf (50℃) /Nf (25℃) ≧0.75

ELECTRICAL AND OPTICAL CHARACTERISTICS (Tc=25℃)

ITEM	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Threshold Current	Ith	CW	——	25	40	mA
Threshold Voltage	Vth	I_F =Ith	——	1	1.2	V
Forward Voltage	V_f	I_F =Ith+20mA	——	1.2	1.5	V
Fiber Output Power	P_f	I_F =Ith+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	λp	P_f TYP	1280	1300	1320	nm
Spectral Radiation Bandwidth	△λ	P_f TYP	——	3	6	nm
Monitoring Output Current	Im	P_f TYP	0.1	0.4		mA
PD Dark Current	I_D	V_R =5V	——	1	2	μA
PD Capacitance	C_t	V_R =5V.f=1MHz	——	15		pF
PD Forward Bandwidth	f_{PD}	V_R =5V	——	200		MHz