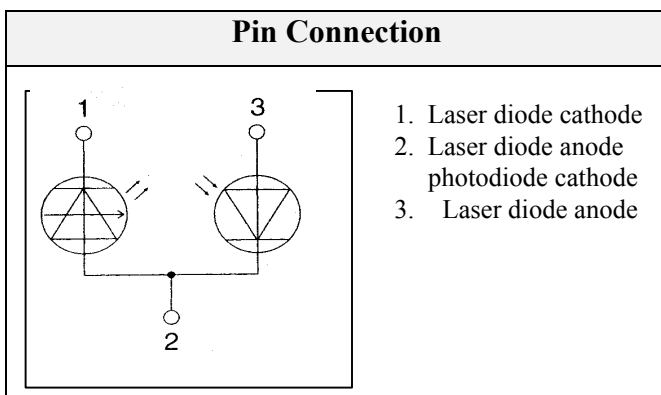


TOSHIBA LASER DIODE

TOLD9225M

InGaAIP LD

?? Lasing Wavelength: $\lambda = 670\text{nm}$ (typ.)
?? Optical Output Power: $P_o = 10\text{mW}$ (CW)
?? Operation Case Temperature: $T_c = -10\sim 60^\circ\text{C}$



Maximum ratings ($T_c=25^\circ\text{C}$)

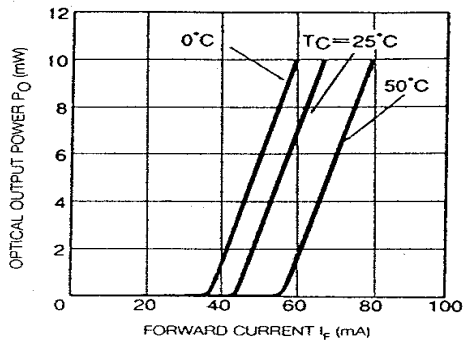
Characteristic	Symbol	Rating	Unit
Optical Output Power (CW)	P_o	10	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	30	V
Operation Case Temperature	T_c	$-10\sim 60$	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-40\sim 85$	$^\circ\text{C}$

Optical-electrical characteristics ($T_c=25^\circ\text{C}$)

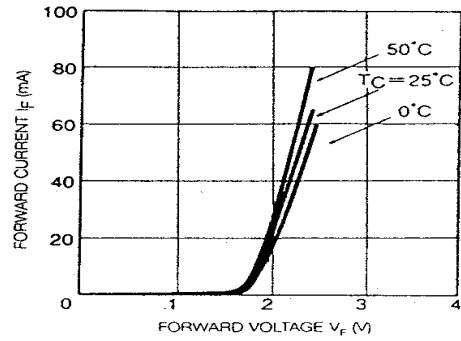
Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Threshold Current	I_{th}	CW operation	----	45	----	mA
Operation Current	I_{op}	$P_o=10\text{mW}$	----	70	----	mA
Operation Voltage	V_{op}	$P_o=10\text{mW}$	----	2.4	----	V
Lasing Wavelength	λ_p	$P_o=10\text{mW}$	----	670	----	nm
Beam Divergence	$\theta_{\parallel}$	$P_o=10\text{mW}$	----	8	----	$^\circ$
	$\theta_{\perp}$	$P_o=10\text{mW}$	----	18	----	$^\circ$
Monitor Current	I_m	$P_o=10\text{mW}$	----	0.3	----	mA
PD Dark Current	$I_{D(PD)}$	$V_R=5\text{V}$	----	----	100	nA
PD Total Capacitance	$C_{T(PD)}$	$V_R=5\text{V}$, $f=1\text{MHz}$	----	----	20	pF

Due to technical progress, the information contained herein may be changed without prior notice

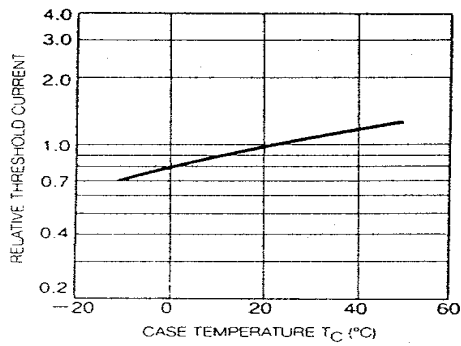
Optical Output Power vs. Forward Current



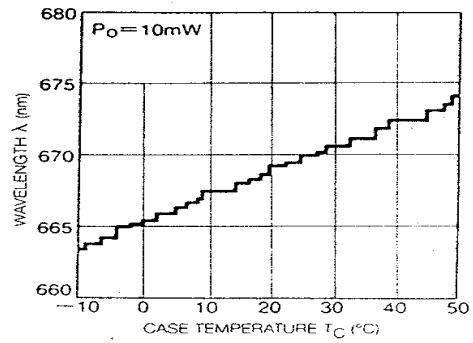
Forward Current vs. Forward Voltage



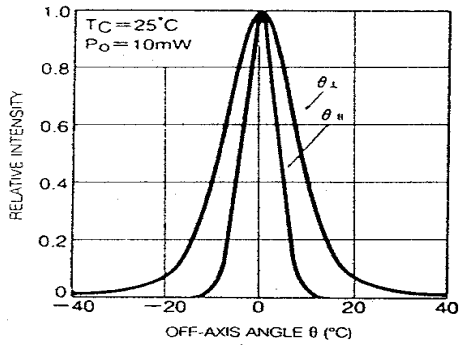
Case Temperature Dependence of Threshold Current



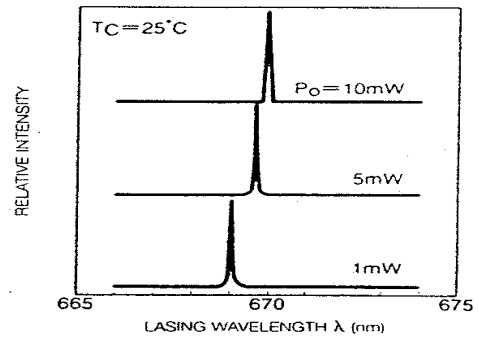
Case Temperature Dependence of Lasing Wavelength



Far-field Patterns



Lasing Spectrum



Monitor current vs. Optical Output Power

