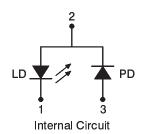
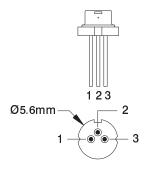
## Toshiba TOLD9231M Laser Diode Specifications

The Toshiba TOLD9231M is a gain guided laser diode with a multi-quantum well structure. The maximum optical output is 5mW and the typical operating wavelength is 670nm. The TOLD9231M is a multi-mode diode which is applicable to products such as bar-code readers, alignment systems and measurement systems. The TOLD9231M has a Ø5.6mm package.



## Absolute Maximum Ratings (Tc=25 °C)

Characteristic	Symbol	Value	Unit
Optical output power	Po	5	mW
Laser diode reverse voltage	VR(LD)	2	V
Photodiode reverse voltage	VR(PD)	30	V
Operating temperature	Topr	-10 to +60	°C
Storage temperature	Tstg	-40 to +85	°C



Package Type: Ø5.6mm

## Operating and Electrical Characteristics (Tc=25 °C)

Characteristic	Symbol	Min.	Тур.	Max.	Unit	Test Condition
Threshold current	lth	-	50	75	mA	_
Operating current	lop	_	60	85	mA	Po=5mW
Operating voltage	Vop	-	2.3	3.0	V	Po=5mW
Lasing Wavelength	λр	660	670	680	nm	Po=5mW
Beam divergence (parallel)	θ //	7	10	16	deg	Po=5mW, (FWHM)
Beam divergence (perpendicular)	θ⊥	26	32	38	deg	Po=5mW, (FWHM)
Monitor current	lm	0.25	0.9	1.7	mA	Po=5mW
Photodiode dark current	ID(PD)	-	-	100	nA	VR(PD)=5V
Photodiode total capacitance	CT(PD)	-	-	20	pF	VR(PD)=5V, f=1MHz
Astigmatism	As	_	40	_	microns	_

Disclaimer: The laser diode information summarized above is based on the respective diode manufacturer's commercial catalog and/or data sheet specifications. The data is presumed to be accurate; however, it is subject to change without notice. Optima makes no representation as to the accuracy of the information and does not assume any responsibility for errors or omissions contained herein. The user must refer to the manufacturers specifications for details concerning the intended application and operation, diode limitations, and safety.

## For current pricing and stock availability please contact:

Optima Precision Inc. 775 SW Long Farm Road West Linn, Oregon 97068 U.S.A. Phone: (503) 638-2525 Fax: (503) 638-4545 email: optima@optima-optics.com

Website: http://www.optima-optics.com