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RLT7805MG TECHNICAL DATA

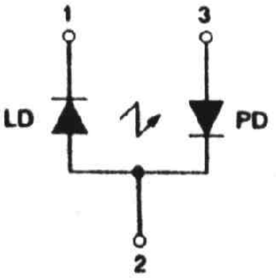
Infrared Laserdiode

Structure: **AlGaAs, index guided, single transverse mode**
Lasing wavelength: **785 nm typ.**
Max. optical power: **8 mW cw**
Package: **5.6 mm**

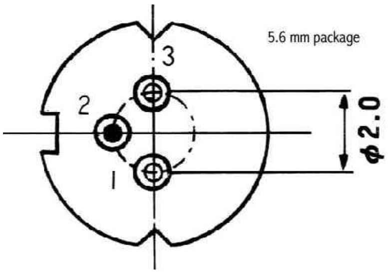
ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC SENSITIVE DEVICE

NOTE!
LASERDIODE
MUST BE COOLED!

PIN CONNECTION:



1) Laser diode anode
2) Laser diode cathode and photodiode anode
3) Photodiode cathode



Maximum Ratings (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power cw	P_o	8	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	30	V
Operation Case Temperature	T_C	-40 .. +60	°C
Storage Temperature	T_{STG}	-40 .. +100	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P_o	kink free		5		mW
Threshold Current	I_{th}	cw		25	40	mA
Operation Current	I_{op}	P_o =5mW		40	70	mA
Operating Voltage	V_{op}	P_o =5mW		2.0	2.5	V
Lasing Wavelength	λ_p	P_o =5mW	770	785	800	nm
Beam Divergence	$\theta_{//}$	P_o =5mW	9	11	15	°
Beam Divergence	$\theta_{\perp}$	P_o =5mW	22	29	36	°
Slope efficiency	η	P_o =5mW	0.25	0.35	0.45	mW/mA
Monitor Current	I_m	P_o=5mW, V_r=5V		0.45	0.90	mA