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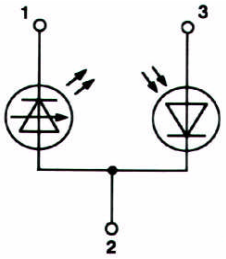
RLT7810G TECHNICAL DATA

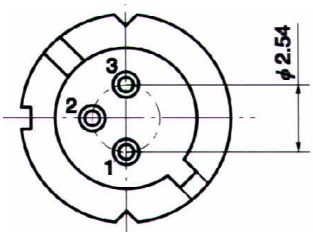
High Power Infrared Laserdiode

Structure: **AlGaAs/GaAs quantum well, Aperture 3 x 1.5 µm**
Lasing wavelength: **780 nm typ.**
Max. optical power: **15 mW, Single Mode**
Package: **9mm G**

PIN CONNECTION:



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



Maximum Ratings (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P_o	15	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	5	V
Operating Temperature	T_C	-50 .. +60	°C
Storage Temperature	T_{STG}	-60 .. +85	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P_o			10		mW
Threshold Current	I_{th}		30	40	50	mA
Operation Current	I_{op}	P_o =10mW	40	60	80	mA
Lasing Wavelength	I_p	P_o =10mW	770	780	790	nm
Beam Divergence	θ //	P_o =10mW		12		°
Beam Divergence	$\theta \perp$	P_o =10mW		25		°
Differential Efficiency	dP_o/dI_{op}	P_o =10mW		0.75		mW/mA
Monitor Current	I_m	P_o =10mW	100	250	600	µA