

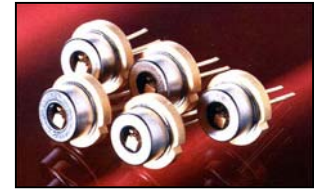
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RLT780-1000G TECHNICAL DATA



High Power Infrared Laser Diode

Lasing mode structure: **multi mode**

Lasing wavelength: **typ. 785 nm**

Optical power: **1 W**

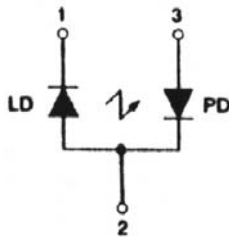
Package: **9 mm (SOT-148)**

NOTE!

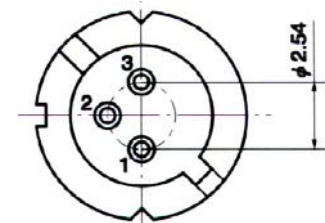
LASERDIODE
MUST BE COOLED!



PIN CONNECTION:



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



Absolute Maximum Ratings (T_c = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P _o	1.2	W
LD Reverse Voltage	V _{R(LD)}	1.5	V
PD Reverse Voltage	V _{R(PD)}	10	V
Operating Temperature	T _C	-20 .. +30	°C
Storage Temperature	T _{STG}	-40 .. +70	°C

Optical-Electrical Characteristics (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Emitting Aperture	A	cw		1 x 100		μm ²
Optical Output Power	P _o	multi mode		1		W
Threshold Current	I _{th}	cw	390	420	450	mA
Operation Current	I _{op}	P _o = 1 W	1.2	1.3	1.4	A
Forward Voltage	U _f	P _o = 1 W	1.8	1.9	2.0	V
Lasing Wavelength	λ _p	P _o = 1 W	780	785	790	nm
Spectral Width FWHM	Δλ	P _o = 1 W	0.3	1.0	1.5	nm
Beam Divergence	θ _{//}	P _o = 1 W		25		°
Beam Divergence	θ _⊥	P _o = 1 W		30		°
Monitor Current	I _m	P _o = 1 W	100	500	1500	μA