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RLT808100GS

TECHNICAL DATA



High Power Infrared Laserdiode

Structure: AlGaAs/GaAs quantum well, aperture 3 x 1 µm

Lasing wavelength: 808 +/- 3 nm typ., singlemode

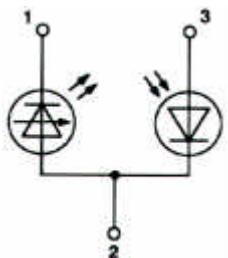
Max. optical power: 110 mW

Package: 9 mm

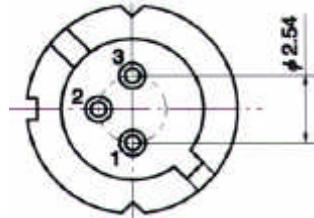


NOTE!
LASERDIODE
MUST BE COOLED!

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	110	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	5	V
Operating Temperature	T _C	-40 .. +60	°C
Storage Temperature	T _{STG}	-50 .. +80	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P _o	kink free		100		mW
Threshold Current	I _{th}		35	45	55	mA
Operation Current	I _{op}	P _o = 100 mW	140	200	220	mA
Lasing Wavelength	λ _p	P _o = 100 mW	805	808	810	nm
Beam Divergence	θ	P _o = 100 mW		10		°
Beam Divergence	θ _⊥	P _o = 100 mW		35		°
Differential Efficiency	dP _o /dI _{op}	P _o = 100 mW		0.75	1.0	mW/mA
Monitor Current	I _m	P _o = 100 mW	100	450	1000	µA