

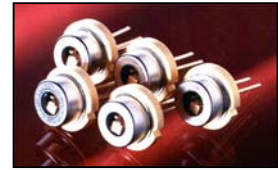
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RLT80850G TECHNICAL DATA



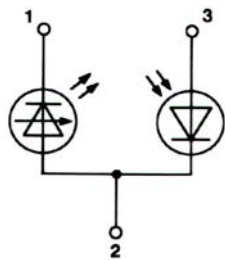
High Power Infrared Laserdiode

Structure: **GaAlAs double heterostructure**
 Lasing wavelength: **808 nm typ., singlemode**
 Max. optical power: **50 mW**
 Package: **9 mm**

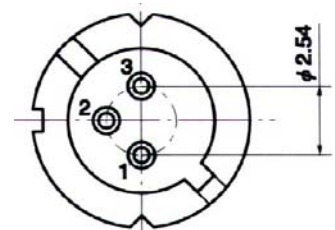
NOTE!
 LASERDIODE
 MUST BE COOLED!

ATTENTION
 OBSERVE PRECAUTIONS
 FOR HANDLING
 ELECTROSTATIC SENSITIVE DEVICE

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	50	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	30	V
Operating Temperature	T_C	-10 .. +40	°C
Storage Temperature	T_{STG}	-40 .. +85	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P_o	Kink free			50	mW
Threshold Current	I_{th}		40	50	60	mA
Operation Current	I_{op}	$P_o = 50 \text{ mW}$		100	150	mA
Operation Voltage	V_{op}	$P_o = 50 \text{ mW}$			2.9	V
Lasing Wavelength	λ_p	$P_o = 50 \text{ mW}$	803	808	813	nm
Beam Divergence	$\theta_{//}$	$P_o = 50 \text{ mW}$	5	8	11	°
Beam Divergence	θ_{\perp}	$P_o = 50 \text{ mW}$	25	31	37	°
Astigmatism	A_s	$P_o = 50 \text{ mW}, NA=0.4$		5		μm
Monitor Current	I_m	$P_o = 50 \text{ mW}, V_r = 5 \text{ V}$		10		μA