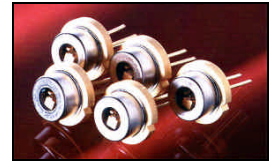


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RLT98500G TECHNICAL DATA



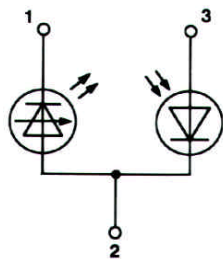
High Power Infrared Laserdiode

Structure: **AlGaAs quantum well**
Lasing wavelength: **980 nm typ.**, multimode
Max. optical power: **600 mW**, **1 x 50 μm^2** aperture
Package: **9 mm G**

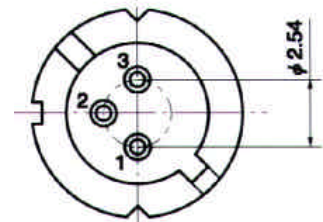
NOTE!
LASERDIODE
MUST BE COOLED!



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	600	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	30	V
Operating Temperature	T_c	-40 .. +50	°C
Storage Temperature	T_{STG}	-70 .. +85	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P_o			500		mW
Threshold Current	I_{th}			300	350	mA
Operation Current	I_{op}	$P_o = 500 \text{ mW}$		690	820	mA
Operation Voltage	U_{op}	$P_o = 500 \text{ mW}$		1.5	1.8	V
Lasing Wavelength	λ_p	$P_o = 500 \text{ mW}$	960	980	990	nm
Spectral Width FWHM	$\Delta\lambda$	$P_o = 500 \text{ mW}$		10		nm
Beam Divergence	$\theta_{//}$	$P_o = 500 \text{ mW}$	7	10	13	°
Beam Divergence	$\theta_{\perp}$	$P_o = 500 \text{ mW}$	15	30	35	°
Differential Efficiency	dP_o/dI_{op}	$P_o = 500 \text{ mW}$	0.4	0.7	1.0	mW/mA
Monitor Current	I_m	$P_o = 500 \text{ mW}$	150	350	600	μA