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RLT78100GLI TECHNICAL DATA



High Power Infrared Wavelength Laserdiode

Structure: **AlGaAs/GaAs**, Aperture: 3 x 1 μm , single mode

Lasing wavelength: **typ. 785 nm**

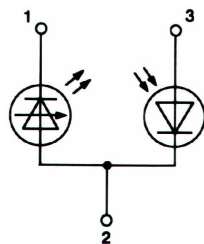
Typ. optical power: **100 mW**

Package: **9 mm**

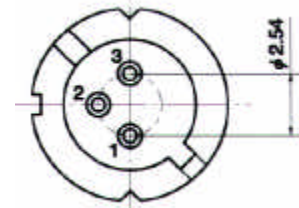


NOTE!
LASERDIODE
MUST BE COOLED!

PIN CONNECTION:



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



Absolute Maximum Ratings ($T_c=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P_o	110	mW
LD Reverse Voltage	$V_{R(LD)}$	0.5	V
PD Reverse Voltage	$V_{R(PD)}$	5	V
Operation Case Temperature	T_c	-50 .. +40	$^\circ\text{C}$
Storage Temperature	T_{STG}	-60 .. +70	$^\circ\text{C}$

Optical-Electrical Characteristics ($T_c = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P_o	kink free		100		mW
Threshold Current	I_{th}	cw	10	30	40	mA
Operation Current	I_{op}	$P_o = 100 \text{ mW}$	90	120	140	mA
Operating Voltage	V_{op}	$P_o = 100 \text{ mW}$	2.0	2.2	2.5	V
Lasing Wavelength	λ_p	$P_o = 100 \text{ mW}$	778	785	790	nm
Beam Divergence	$\theta_{//}$	$P_o = 100 \text{ mW}$		7		$^\circ$
Beam Divergence	θ_{\perp}	$P_o = 100 \text{ mW}$	30	35	40	$^\circ$
Monitor Current	I_m	$P_o = 100 \text{ mW}$	90	100	500	μA
Slope Efficiency	η	$P_o = 100 \text{ mW}$	0.8	1.1	1.3	W/A