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RLT7825G TECHNICAL DATA

Infrared Laserdiode

Structure: **GaAlAs, double heterostructure, index guided**

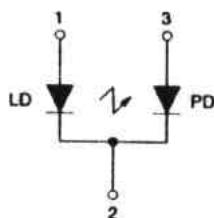
Lasing wavelength: **780 nm**

Max. optical power: **25 mW**

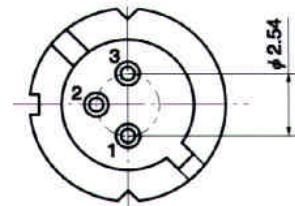
Package: **9 mm**



PIN CONNECTION:



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



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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P_o	25	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	30	V
Operation Case Temperature	T_c	-10 .. +50	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 .. +85	$^\circ\text{C}$

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	I_{th}		-	50	70	mA
Operation Current	I_{op}	$P_o = 20 \text{ mW}$	-	90	130	mA
Operating Voltage	V_{op}	$P_o = 20 \text{ mW}$		2.2	2.5	V
Lasing Wavelength	λ_p	$P_o = 20 \text{ mW}$	770	780	800	nm
Beam Divergence	$\theta_{//}$	$P_o = 20 \text{ mW}$	7	11	15	$^\circ$
Beam Divergence	θ_\perp	$P_o = 20 \text{ mW}$	15	28	40	$^\circ$
Off Axis Angle	$\Delta\theta_\perp$	-	-	-	± 3	$^\circ$
Off Axis Angle	$\Delta\theta_{//}$	-	-	-	± 3	$^\circ$
Monitor Current	I_m	$P_o = 20 \text{ mW}$	0.2	1.0	-	mA