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RLT1650-5G TECHNICAL DATA



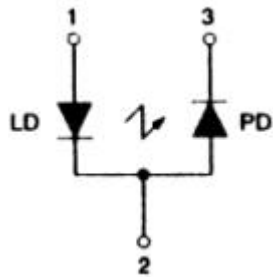
Infrared Laserdiode

Structure: **QW structure**
Lasing wavelength: **1650 nm typ.**
Lasing Aperture: **1.5 x 3 μm^2**
Max. optical power: **5 mW, single mode**
Package: **9 mm**

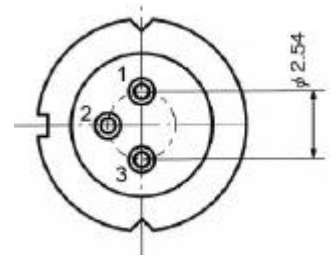
NOTE!
LASERDIODE
MUST BE COOLED!



PIN CONNECTION:



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



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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P_o	5	mW
LD Reverse Voltage	$V_{R(LD)}$	1.5	V
PD Reverse Voltage	$V_{R(PD)}$	6	V
Operating Temperature	T_c	-60 .. +60	$^\circ\text{C}$
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
Optical Output Power	P_o	cw			5	mW
Threshold Current	I_{th}	cw		40		mA
Operation Current	I_{op}	$P_o = 5 \text{ mW}$		70		mA
Forward Voltage	U_f	$P_o = 5 \text{ mW}$		2.0		V
Lasing Wavelength	λ_p	$P_o = 5 \text{ mW}$		1650		nm
Spectral Width (FWHM)	$\Delta\lambda$	$P_o = 5 \text{ mW}$		2.0		nm
Beam Divergence	$\theta_{//}$	$P_o = 5 \text{ mW}$		10		$^\circ$
Beam Divergence	$\theta_{\perp}$	$P_o = 5 \text{ mW}$		40		$^\circ$
Differential Efficiency	dP_o/dI_{op}	$P_o = 5 \text{ mW}$		0.2		mW/mA
Monitor Current	I_m	$P_o = 5 \text{ mW}$		40		μA