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RLT8340G TECHNICAL DATA

DL-5032-001

High Power Infrared Laserdiode

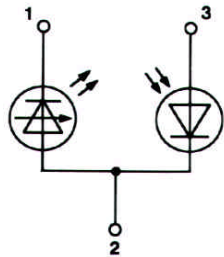
Structure: **GaAIAs double heterostructure**

Lasing wavelength: **830 nm typ.**

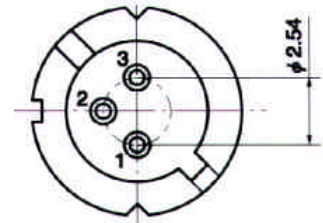
Max. optical power: **40 mW**

Package: **9mm G**

PIN CONNECTION:



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



Maximum Ratings (T_c=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P _o	40	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	T _C	-10 .. +50	°C
Storage Temperature	T _{STG}	-40 .. +85	°C

Optical-Electrical Characteristics (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P _o			30		mW
Threshold Current	I _{th}			40	70	mA
Operation Current	I _{op}	P _o = 30mW		85	130	mA
Lasing Wavelength	λ _p	P _o = 30mW	815	830	845	nm
Beam Divergence	θ _{//}	P _o = 30mW	7	10	13	°
Beam Divergence	θ _⊥	P _o = 30mW	15	25	35	°
Differential Efficiency	dP _o /dI _{op}	P _o = 30mW	0.40	0.70		mW/mA
Monitor Current	I _m	P _o = 30mW	150	350		μA