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RLT8505MG TECHNICAL DATA



Infrared Laserdiode

Structure: **AlGaAs double heterostructure**

Lasing wavelength: **850 nm typ.**

Max. optical power: **5 mW**

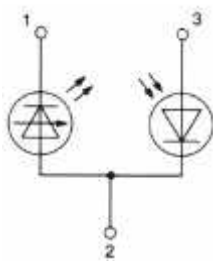
Package: **5.6 mm**

NOTE!

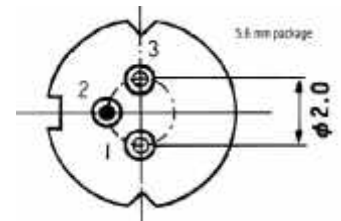
LASERDIODE
MUST BE COOLED!



PIN CONNECTION:



- 1) Laserdiode cathode
- 2) Laserdiode anode and photodiode cathode
- 3) Photodiode anode



Maximum Ratings (T_c=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P _o	5	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	T _{op}	-10 .. +40	°C
Storage Temperature	T _{stg}	-40 .. +85	°C

Optical-Electrical Characteristics (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	I _{th}	cw	5	10	15	mA
Operation Current	I _{op}	P _o = 5 mW	15	20	25	mA
Operation Voltage	V _{op}	P _o = 5 mW	1.8	1.9	2.0	V
Lasing Wavelength	λ _p	P _o = 5 mW	845	850	855	nm
Beam Divergence	θ _{//}	P _o = 5 mW	8	10	11	°
Beam Divergence	θ _⊥	P _o = 5 mW	25	30	40	°
Differential Efficiency	η	P _o = 5 mW	400	500	550	μW/mA
Monitor Current	I _m	P _o = 5 mW, V _r =5V	0.3	0.5	1.0	mA