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S6310MG TECHNICAL DATA



Visible Wavelength Laserdiode

Structure: **InGaAlP**, index guided single transverse mode

Lasing wavelength: **635 nm typ.**

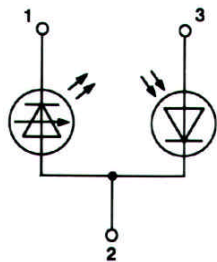
Output power: **10 mW, CW**

Package: **5.6 mm MG, TO-18**

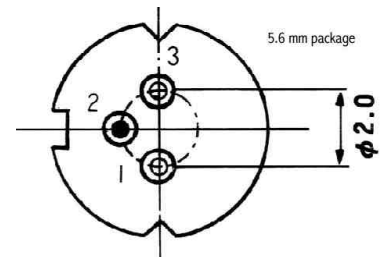


NOTE!
LASERDIODE
MUST BE COOLED!

PIN CONNECTION:



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



Maximum Ratings (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P_o	10	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	30	V
Operation Case Temperature	T_c	-10 .. +60	°C
Storage Temperature	T_{STG}	-40 .. +85	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	I_{th}			20	40	mA
Operation Current	I_{op}	$P_o = 10 \text{ mW}$		30	50	mA
Operating Voltage	V_{op}	$P_o = 10 \text{ mW}$		2.45	2.8	V
Lasing Wavelength	λ_p	$P_o = 10 \text{ mW}$	630	635	642	nm
Beam Divergence	$\theta_{//}$	$P_o = 10 \text{ mW}$	5	7	9	°
Beam Divergence	$\theta_{\perp}$	$P_o = 10 \text{ mW}$	30	32	38	°
Slope Efficiency	η		0.3	0.6	1	mW/mA
Monitor Current	I_m	$P_o = 10 \text{ mW}$	50	200	500	μA