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QL65J7SA

TECHNICAL DATA

High Power Infrared Laser Diode

Features

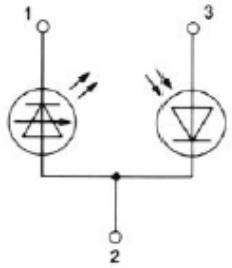
- Visible Light Output: typ. 660nm
- Optical Power Output: 50 mW CW
- Package Type: TO-18 (5.6 mm)
- Built-in Photo Diode for Monitoring Laser Diode

Applications

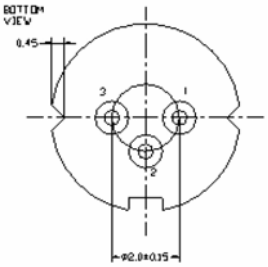
- DVD R/RW
- Optical Module

NOTE!
LASERDIODE
MUST BE COOLED!

PIN CONNECTION



1. Laserdiode cathode
2. Laserdiode anode and photodiode cathode
3. Photodiode anode



Absolute Maximum Rating (T_C=25°C)

Type	Symbol	Value	Unit
Absolute Maximum Ratings			
Optical Output Power	P	60	mW
Laser Diode Reverse Voltage	V	2	V
Photo Diode Reverse Voltage	V	30	V
Operating Temperature	T_{OP}	-10 … +75	°C
Storage Temperature	T_{STG}	-40 … +85	°C

Electgrical and Optical Characteristics (T_C=25°C)

Type	Symbol	Min.	Typ.	Max.	Unit	Condition
Optical Specification						
Output Power	P_O	-	50	-	mW	P_O =50mW
Lasing Wavelength	λ_P	653	660	667	nm	P_O =50mW
Beam Divergence	$\theta_{\parallel}$	6	9	12	deg	P_O =50mW
	$\theta_{\perp}$	15	20	25	deg	P_O =50mW
Beam Angle	$\Delta\theta_{\parallel}$	-	-	±3	deg	P_O =50mW
	$\Delta\theta_{\perp}$	-	-	±3	deg	P_O =50mW
Electrical Specification						
Slope Efficiency	E_S	-	1.0	-	mW/mA	P_O =30~50mW
Threshold Current	I_{th}	30	45	60	mA	P_O =50mW
Operation Current	I_{OP}	-	90	120	mA	P_O =50mW
Operation Voltage	V_{OP}	-	2.6	3.0	V	P_O =50mW

Package Dimensons

TO-18 Package (*Unit:mm*)