

### HL6738MG



### Description

This 690 nm, 30 mW TO packaged laser diode is a compact light source that outputs a single transverse mode and is suited for a variety of applications such as test and measurement, laser modules, or sensing. It is packaged in a standard Ø5.6 mm TO can package and has a C pin configuration. This laser diode is compatible with our line of laser diode and TEC controllers as well as our selection of collimation solutions and TO can laser diode mounts.

### Specifications

Absolute Maximum Ratings <sup>a</sup>	
Specification	Maximum
Optical Output Power, CW	35 mW
LD Reverse Voltage	2 V
PD Reverse Voltage	30 V
Operating Temperature	-10 °C to 70 °C
Storage Temperature	-40 °C to 85 °C



- a. Absolute Maximum Rating specifications should never be exceeded. Operating at or beyond these conditions can permanently damage the laser.

HL6738MG Specifications <sup>a</sup>					
	Symbol	Min	Typical	Max	
Center Wavelength @ P <sub>op</sub>	$\lambda_o$	680 nm	690 nm	698 nm	
Optical Output Power, CW	P <sub>op</sub>	-	30 mW	-	
Threshold Current	I <sub>TH</sub>	-	50 mA	70 mA	
Operating Current, CW @ P <sub>op</sub>	I <sub>op</sub>	-	85 mA	115 mA	
Operating Voltage @ P <sub>op</sub>	V <sub>op</sub>	-	2.5 V	3.0 V	
Slope Efficiency	$\eta$	0.5 mW/mA	0.8 mW/mA	1.0 mW/mA	
Beam Divergence (FWHM) @ P <sub>op</sub>	Parallel	$\theta_{//}$	7°	8.5°	10.5°
	Perpendicular	$\theta_{\perp}$	17°	19°	23°
Monitor Current @ P <sub>op</sub>	I <sub>PD</sub>	0.02 mA	0.1 mA	0.45 mA	

- a. T<sub>CASE</sub> = 25 °C if not specified.

## Drawing

