

**FARL-7S-650-TO56-85°-APC
LASER DIODE 635nm 7mW**

Features

- High Temperature Operation (85°)
- Built-in APC
- High Reliable Operation
- Stable Output Power
- Voltage Driven / Easy To Use

Applications

- High Precision Measuring Instruments
- High Precision Industrial Markers
- Survey and Engineering Instruments

Absolute Maximum Ratings

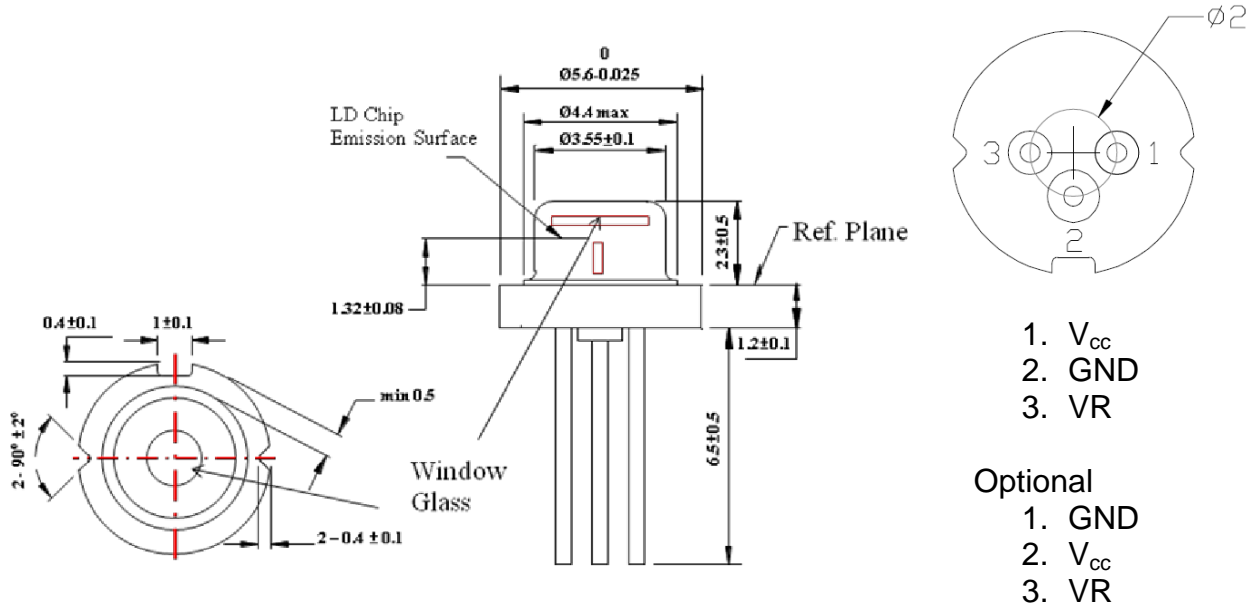
Operating Parameters	Symbol	Value	Unit
Power Supply Voltage	V_{CC}	2.5 - 6	V
Optical Output Power (cw)	P_{out}	10	mW
Case Temperature	T_C	-10 ~ +85	°C
Storage Temperature	T_S	-40 ~ +85	°C

Specifications (T = 25°C, P = 7mW)

Operating Parameters	Symbol	Min	Typ	Max	Unit
Wavelength	λ	645	650	660	nm
Operating Current	I_{op}	-	26	35	mA
Variable Resistor	VR	3	9	17	K Ω
Beam Divergence Parallel	$\Theta_{ }$	6	8	12	deg.
Beam Divergence Perpendicular	Θ_{\perp}	25	28	32	deg.
Static Alignment	$\Delta\alpha_{ } \times \Delta\alpha_{\perp}$	-	-	± 3	deg
Positional Accuracy	$\Delta X, \Delta Y, \Delta Z$	-	-	± 80	μm
Power-Temp. Stability (25-85°C)	ΔP_{oT}	-20	-10	0	%
Power- V_{CC} Stability (2.5-6.0V)	ΔP_{oV}	-15	-10	0	%

PACKAGE SPECIFICATION

Package 5.6mm



Traditionally LDs need to be connected to an external APC circuit board for constant power operation. Here the VR (variable resistor) is used to adjust the laser output power. This laser diode consists of an APC IC inside the 5.6mm package and leaves the VR outside for optical power adjustment. For stabilizing the optical output power it is recommended to use an Oscillation Damper. Battery reverse protection is recommended for protecting the APC circuit.

