

LASER DIODE FLX-645-250M-50



FLX-645-250M-50 is a multimode semiconductor laser diode with 250mW CW output power at 645nm. Available packages are B-Mount, C-Mount, Q-Mount, 9mm TO can, TO-3 can and HHL. It is suitable for the use in various opto-electronic applications.

Key Features

- High Output Power
- High Efficiency
- Custom Packaging Available
- Custom Wavelengths Available

Specifications

Optical and Electrical Characteristics (T = 20°C, P = 250mW):

Operating Parameters	Symbol	Min	Typ	Max	Unit
Optical Power	P_{out}	-	250	-	mW
Wavelength	λ	642	645	648	nm
Spectrum (FWHM)	$\Delta\lambda$	-	1	-	nm
Threshold Current	I_{th}	-	375	-	mA
Forward Current	I_f	-	600	-	mA
Forward Voltage	V_f	-	2.1	-	V
Slope Efficiency	$\Delta P/\Delta I$	-	1.1	-	W/A
Beam Divergence Parallel	$\Theta_{ }$	-	7	-	° (FWHM)
Beam Divergence Perpendicular	Θ_{\perp}	-	34	-	° (FWHM)
Polarization		-	TE	-	
Emitter Size		-	50	-	μm

Packages

B-Mount Package

Features include:

- Very Small Footprint
- Requires Soldering to Heatsink
- Material - Copper Tungsten (CuW)
- Fast Axis Lensing Optional



C-Mount Package

Features include:

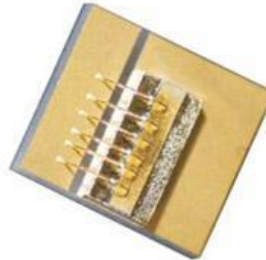
- Designed for up to 4mm cavity length laser diodes
- Small Footprint with Screw Mounting
- Material - Copper (OFHC)
- Fast Axis Lensing Optional



Q-Mount Package

Features include:

- Very Small Footprint
- Requires Soldering to Heatsink
- Material - Copper Tungsten (CuW)
- Fast Axis Lensing Optional



Standard 9mm Package

Features include:

- Industry Standard Package
- Hermetically Sealed Windowed Package
- Header Material - Copper
- Internal Photodiode Optional
- Isolated Package Optional
- Fast Axis Lensing Optional



TO-3 Package

Features include:

- Hermetically Sealed Windowed Package
- Mounting to Heatsink with Screws
- Internal Peltier Cooler (TEC) Optional
- Internal Thermistor and Photodiode Optional
- Header Material - Copper
- Fast Axis Lensing Optional



High Heat Load (HHL) Package

Features include:

- Hermetically Sealed Windowed Package
- Mounting to Heatsink with Screws
- Internal Peltier Cooler (TEC)
- Internal Thermistor and Photodiode
- Header Material - Copper
- Fast Axis Lensing Optional

