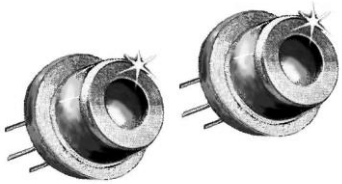

LASER DIODE FLC-905-19P

FLC-905-19P is a pulse multimode injection semiconductor laser diode. It is available on ceramic submount, in TO-18, TO-56, SOT-148 and 6mm coaxial package. The laser diode is suitable for the use in various opto-electronic applications.

APPLICATIONS:

- Range finding
- Surveying equipment
- Weapons simulation
- Laser radar
- Security barrier
- Optical trigger

Optical and electrical characteristics (T =21°C, t_W = 150ns, P_{rr} = 6.66kHz):

Operating parameters	Symbol	Min	Typ	Max	Unit
Optical output power	P_{out}	19			W
Lasing wavelength	λ	895	905	915	nm
Emitting area	WxH		230 × 1		μm
Threshold current	I_{TH}		600		mA
Forward current	I_F		22		A
Peak reverse voltage	V_R			6	V
Slope efficiency			1		W/A
Beam divergence parallel	$\Theta_{\|\|}$		12		deg.
Beam divergence	$\Theta_{\perp}$		25		deg.
Spectral width (FWHM)	$\Delta\lambda$		5		nm
Mode structure			MM		

Additional information

- - thermal wavelength drift - 0.27nm/°C
- - max. pulse duration – 1 μs
- - max. duty factor - 0.1%
- - operating temperature - -45°C +85°C;
- - storage temperature - -55°C +100°C
- - lead soldering 5 seconds max at - +200°C

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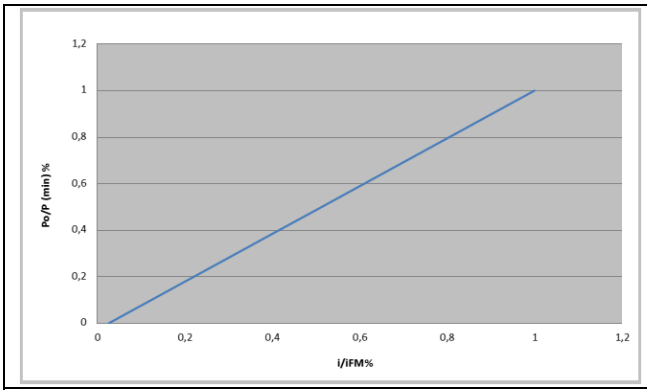
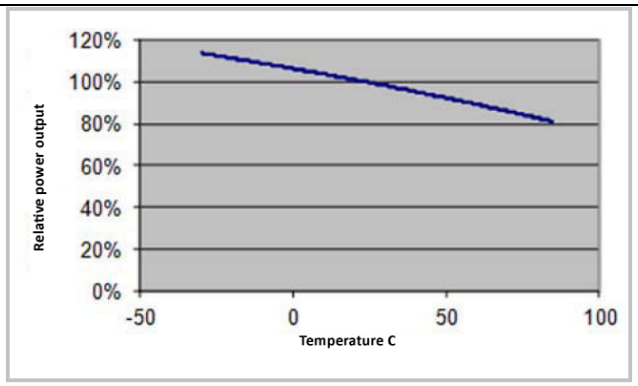
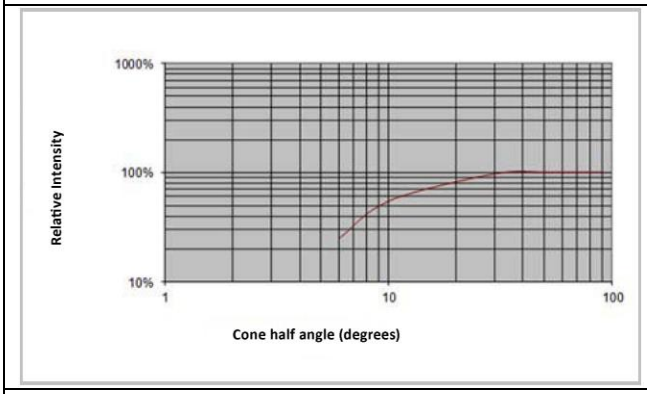
PERFORMANCE SPECIFICATIONS



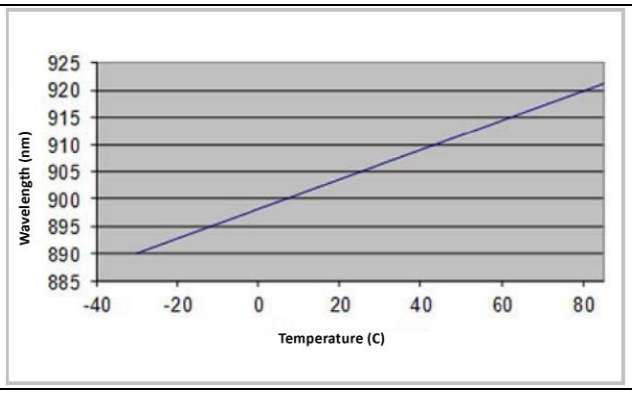
Optical Output Power vs. Operating Current



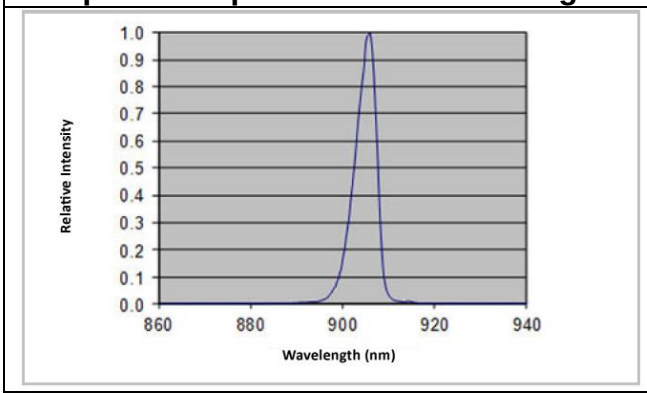
Optical Output Power vs. Temperature



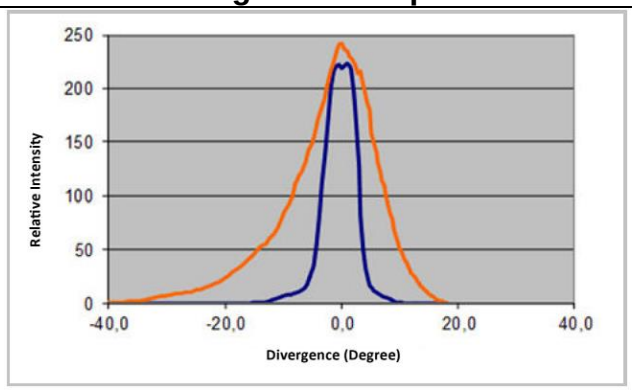
Optical Output Power vs. Half Angle



Wavelength vs. Temperature



Emission Spectrum



Far-field Pattern

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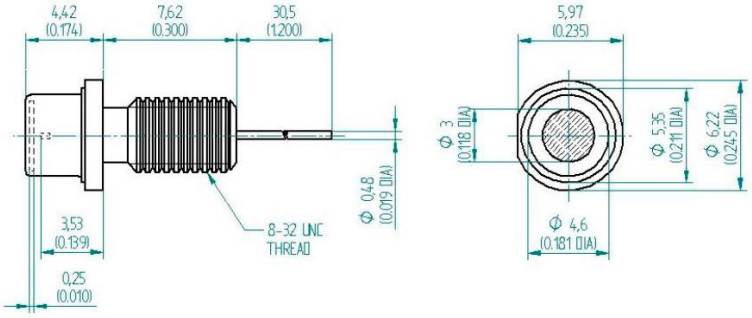
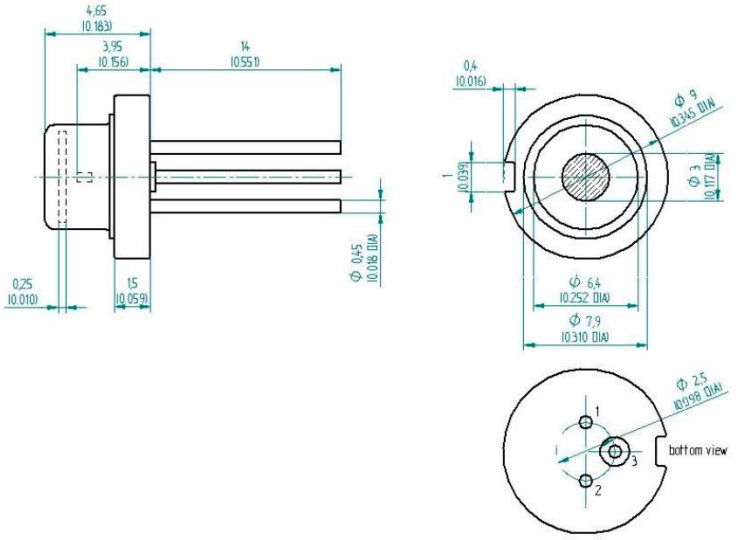
PACKAGE DRAWINGS

6mm Coax



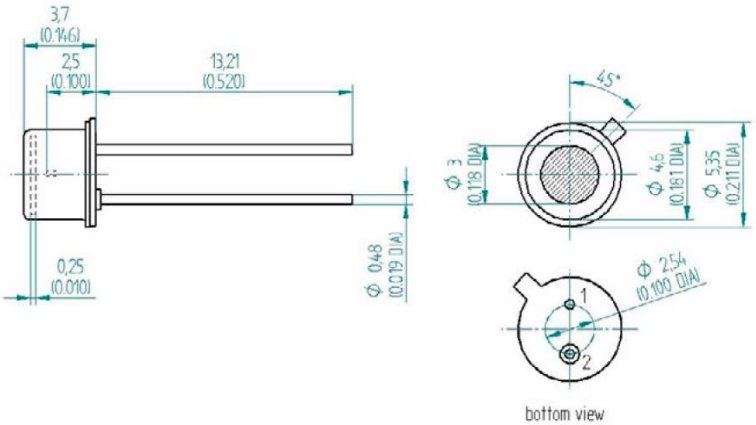
Pin Out: Case (-), Pin (+), Inductance 12 nH

SOT-148



Pin Out: 1. LD Anode (+),
2. NC,
3. LD Cathode (-) Case, Inductance 6.8 nH

TO-18



Pin Out: 1. LD Anode (+),
2. LD Cathode (-) Case, Inductance 5.2 nH

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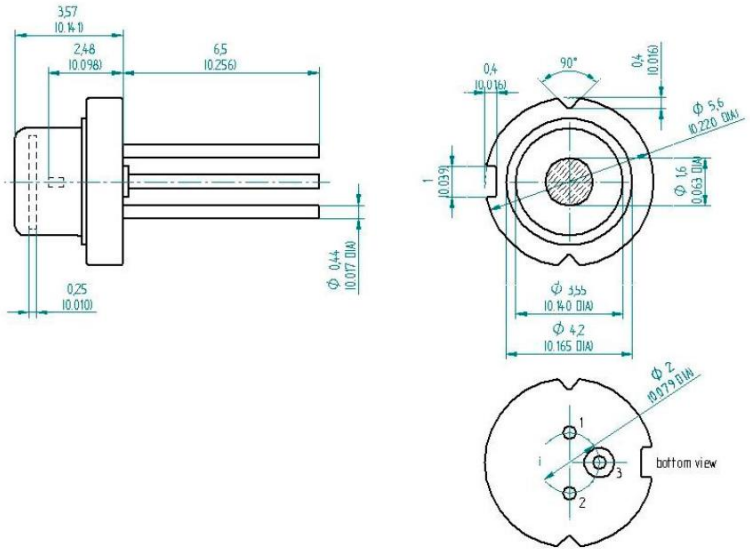
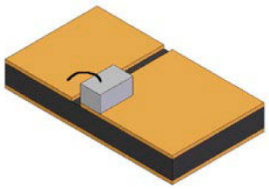
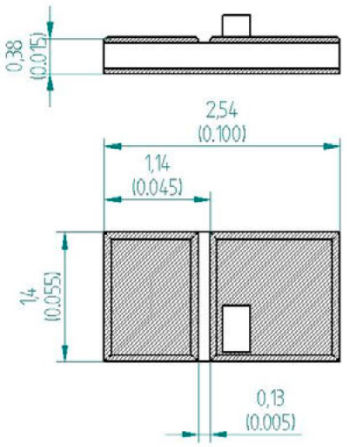
TO-56



Pin Out: 1. LD Anode (+),
2. NC,
3. LD Cathode (-) Case, Inductance 5.0 nH

Ceramic Submount





Pin Out: 1. LD Anode (+),
2. LD Cathode (-) Case, Inductance 1.6 nH

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