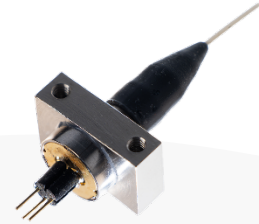


# High Power Laser Diode Fiber Coupled TO9



## Part Number: TO9F-105

High Power TO9 Fiber Coupled Module  
Single-Mode Fabry-Perot Laser Diode  
CW Wavelength at 1640nm



## Features

- High Output Power
- High Dynamic Range
- High Efficiency
- TO9 Fiber Coupled Module
- Cost Effective

## Application

- Telecom OTDR
- Optical Comm



SemiNex delivers the highest available power at infrared wavelengths between 12xx and 19xx nm. When necessary, we will further optimize the design of our InP & GaSb laser chips to meet our customers' specific optical and electrical performance needs. Diodes, bars and packages are tested to meet customer and market performance demands. Typical results and packaging options are shown. Contact SemiNex for additional details or to discuss your specific requirements.

# High Power Laser Diode Fiber Coupled TO9



## Specification

TO9F-105



Optical	Symbol	Typ.	Units
Center Wavelength	$\lambda_c$	1640	nm ( $\pm 20$ )
Output Power (CW)*	$P_{out}$	0.1	watts ( $\pm 10\%$ )
Spectral Width FWHM	$\Delta\lambda$	10	nm
Slope Efficiency	$\eta$	0.15	W/A
Optical Fiber Core Dia.		9	$\mu\text{m}$
Optical Fiber NA		SMF	
Electrical	Symbol		Units
Power Conversion Eff.	$\eta$	10	%
Operating Current	$I_{op}$	0.6	A
Threshold Current	$I_{TH}$	0.07	A
Operating Voltage	$V_{op}$	2.1	V
Mechanical	Symbol		Units
Fiber Length		1	meters
Connector Type		FC/PC	
		Range	
Operating Temp.**		-40 to 60	$^{\circ}\text{C}$
Storage Temp.		-40 to 80	$^{\circ}\text{C}$

PLEASE NOTE: The TO9F laser package is not electrically isolated. The package body is the anode connection. Care should be taken in mounting and installation.  
 \*Specified values are rated at a constant heat sink temperature of 20°C.  
 \*\*High temperature operation will reduce performance and MTTF.  
 Unless otherwise indicated all values are nominal.

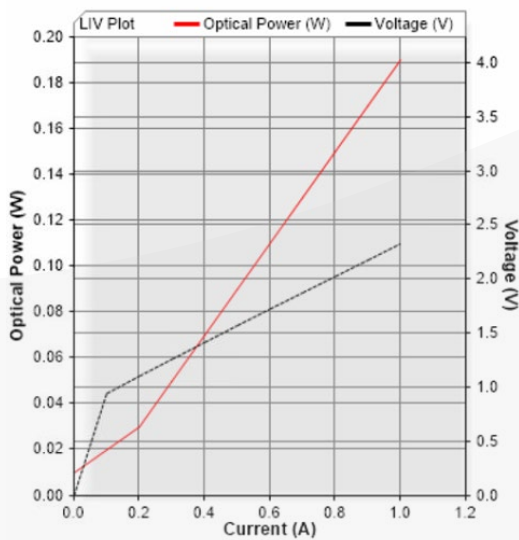
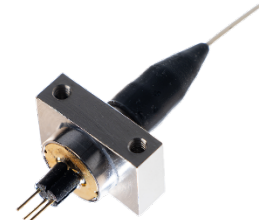
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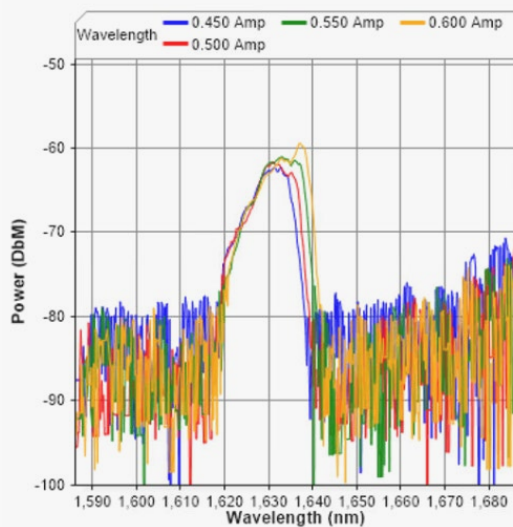
## SemiNex Laser Diodes TO9F-105

### Graphs & Data

#### Typical TO9F L-I-V Characteristics



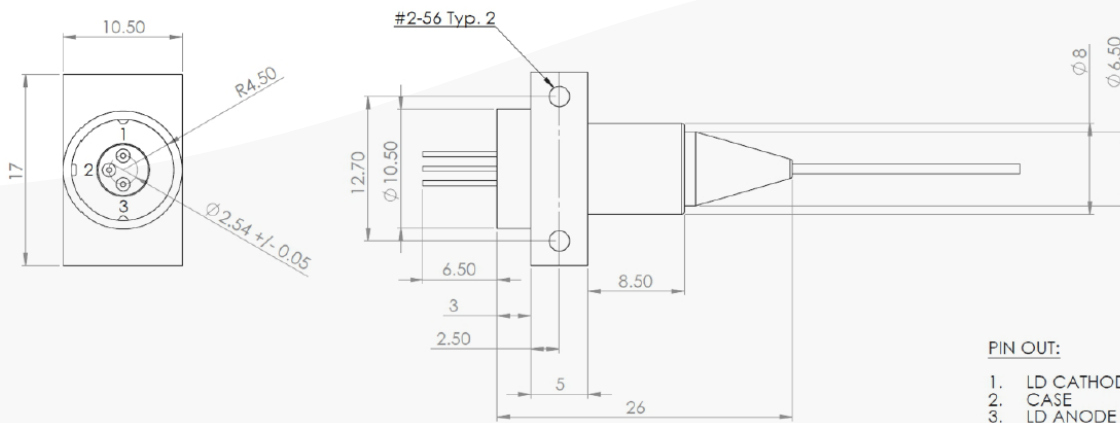
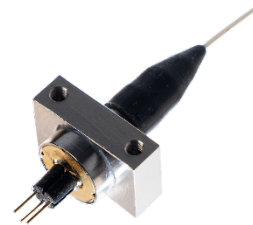
#### Typical TO9F Output Spectrum



# High Power Laser Diode Fiber Coupled TO9



## Mechanical Drawing



- PIN OUT:
1. LD CATHODE (-)
  2. CASE
  3. LD ANODE (+)

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