



Model Number: APS-940nm-100mW-STM-9.0mm-CC

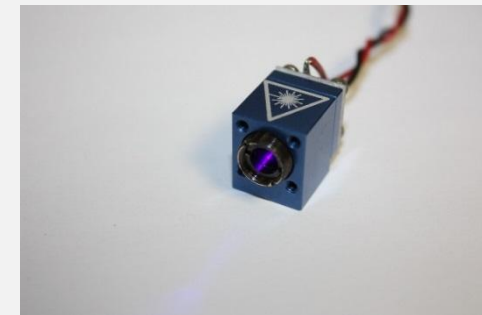
APS 100 mW 940 nm Laser Diode Module With Adjustable Aspheric Collimating Lens

Absolute Maximum Ratings at 25 °C

Item	Ratings	Unit
CW Output Power	100	mW
Laser Diode Reverse Voltage	2	V
Maximum Operating Current	180	mA
Operating Temperature	-20 to 50	°C
Storage Temperature	-40 to 80	°C

- **Simple Integrated Package**
- **Excellent Diode Heatsinking**
- **Small Footprint**
- **Simple Connection With Two Power Leads**
- **Adjustable Collimating Lens**
- **Lightweight, Rugged**
- **Precision Machined**

Applications: Pointing, Illumination





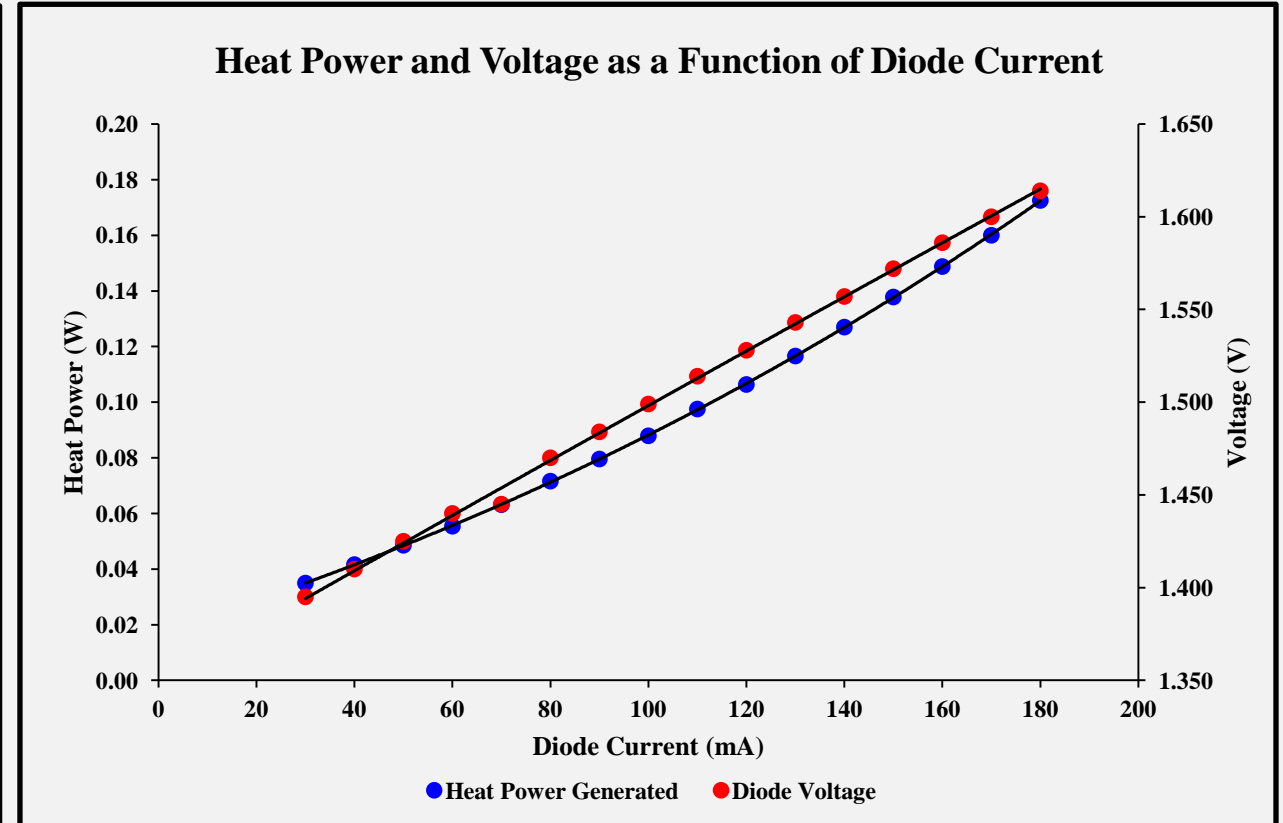
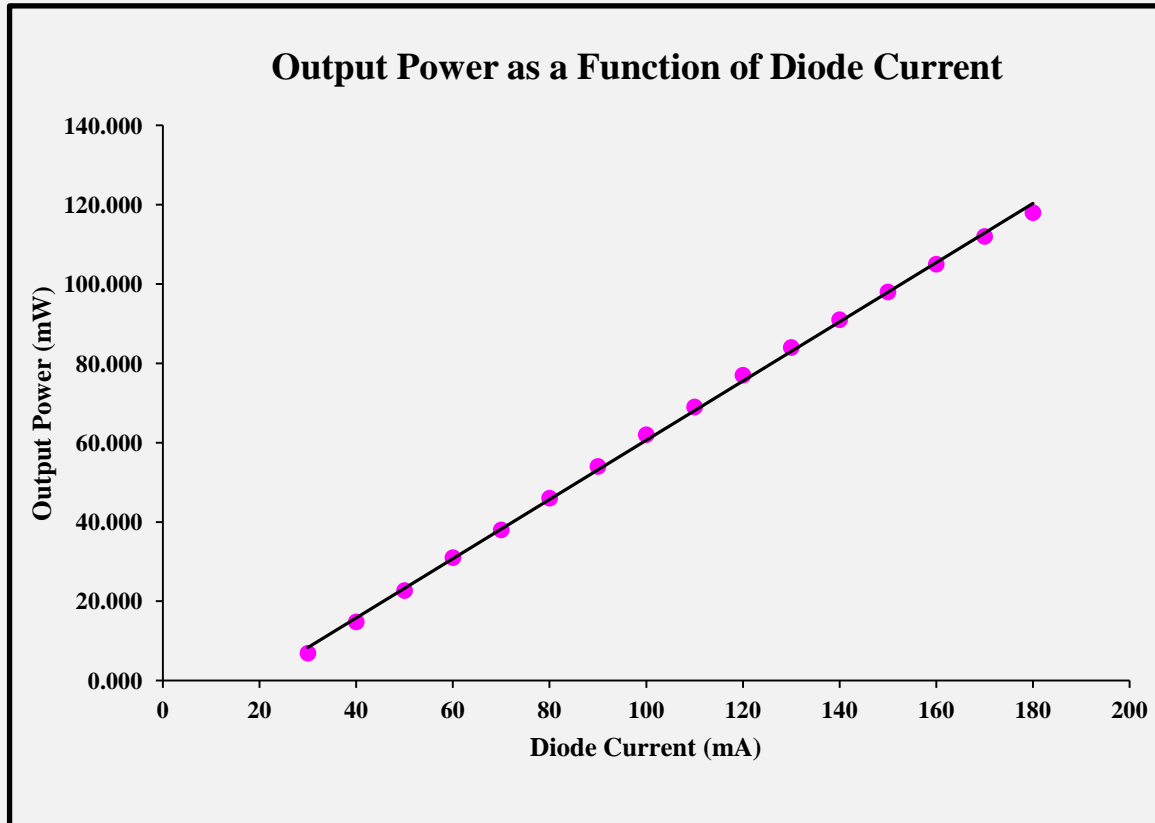
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Optical and Electrical Characteristics at 25 °C

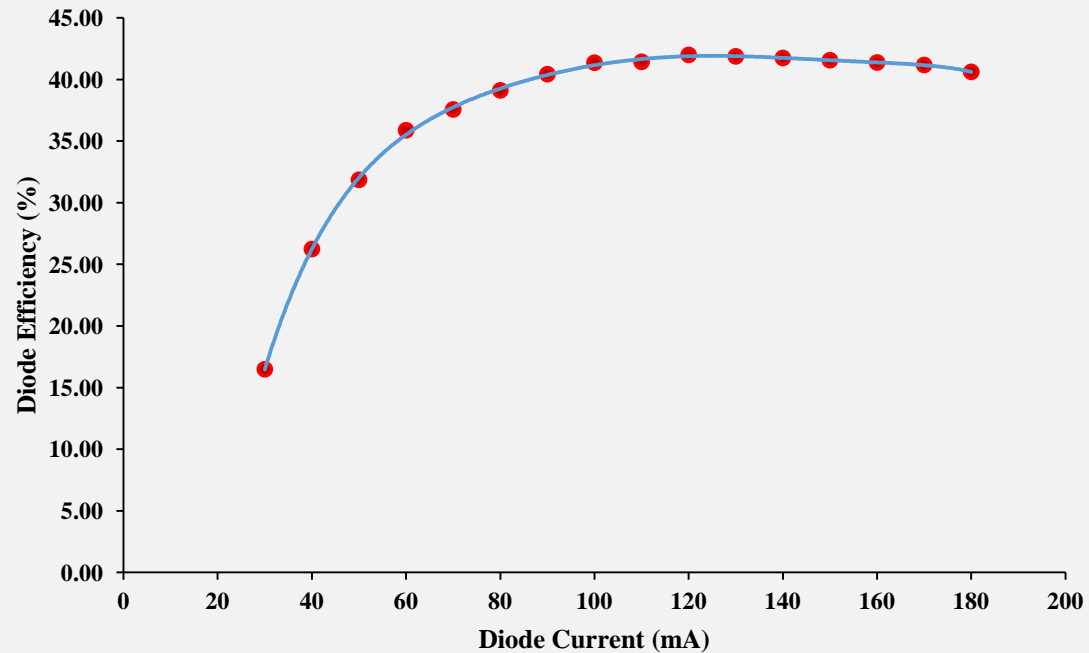
Parameter	Min	Typical	Max	Units	Test Condition
Threshold Current	-	20	40	mA	-
Operating Current	-	140	180	mA	$P_o = 100 \text{ mW}$
Operating Voltage	-	1.9	2.2	V	$P_o = 100 \text{ mW}$
Fast Axis Beam Divergence	-	50	58	°	$P_o = 100 \text{ mW}$ 1/e ² Full Angle
Slow Axis Beam Divergence	-	14	18	°	$P_o = 100 \text{ mW}$ 1/e ² Full Angle
Lasing Wavelength	935	940	945	nm	$P_o = 100 \text{ mW}$
Transverse Mode	STM	STM	STM	-	All Currents
Polarization TE	-	-	-	-	Horizontal

Module Experimental Data

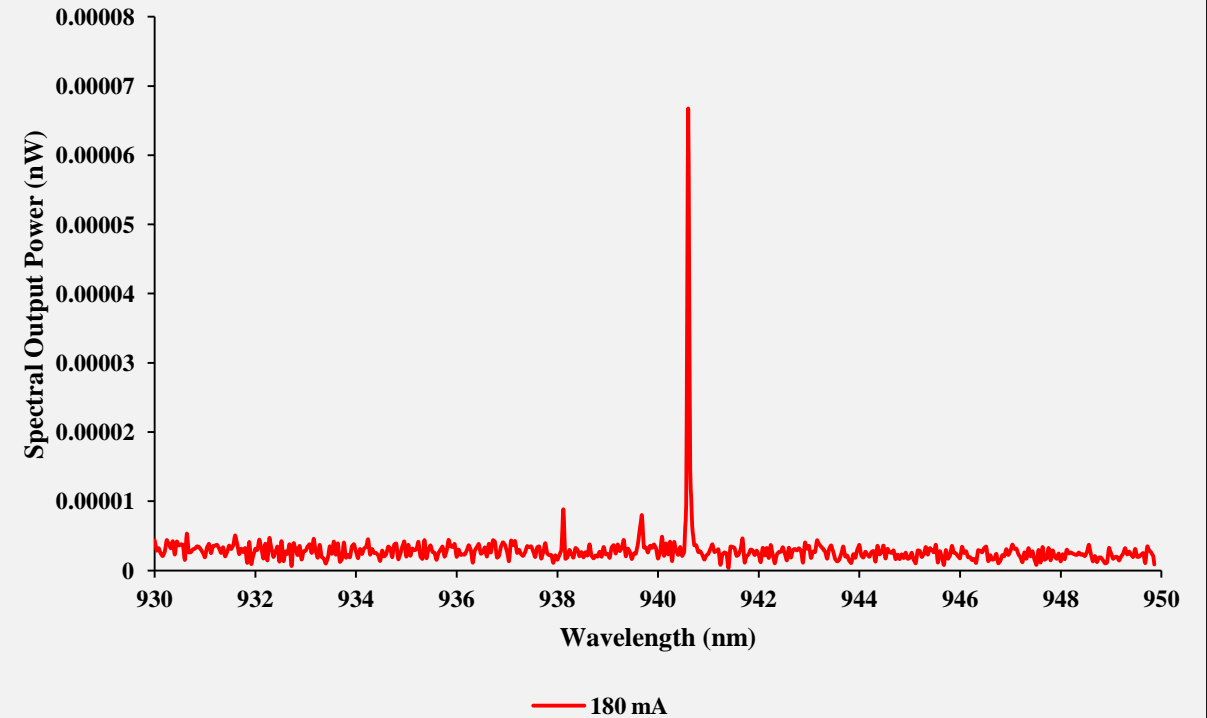


Module Experimental Data

Wallplug Efficiency as a Function of Diode Current

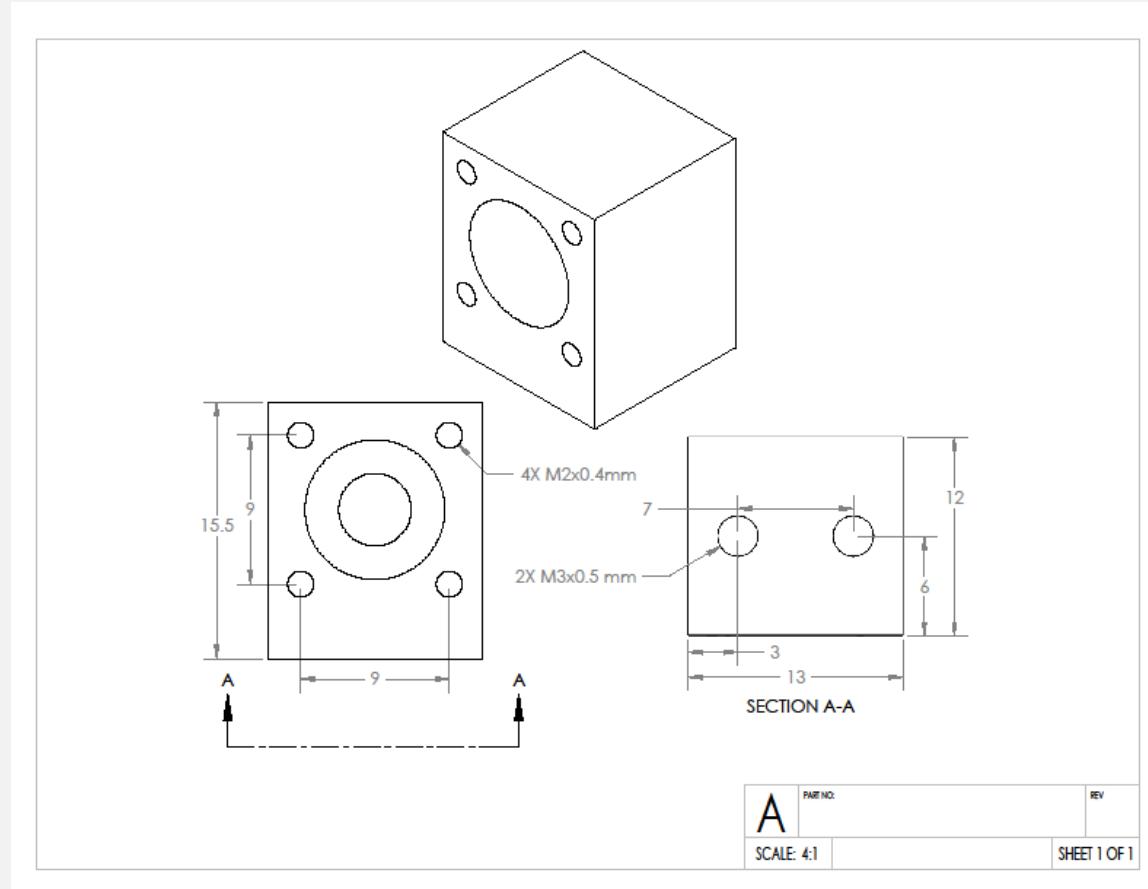


Spectral Output Power as a Function of Wavelength



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Module Dimensions and Mounting Screws





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Laser Safety Warnings

- **This OEM Micro-Module is meant for integration into other systems, and as such is not CDRH compliant.**
- **This Micro-Module is a Class IIIB laser product.**
- **Always use laser safety glasses with sufficient Neutral Density at the operating wavelength of 940 nm to protect your eyes.**
- **Skin exposure to this laser product should be avoided.**