



Model Number: APS-510nm-10mW-STM-5.6mm-APC

APS 10 mW 510 nm Laser Diode Module With Adjustable Aspheric Collimating Lens

Absolute Maximum Ratings at 25 °C

Item	Ratings	Unit
CW Output Power	10	mW
Laser Diode Reverse Voltage	2	V
Maximum Operating Current	100	mA
Operating Temperature	-20 to 60	°C
Storage Temperature	-40 to 85	°C

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

**Applications: Pointing, Alignment,
Illumination, Laser Projection and
Shows**

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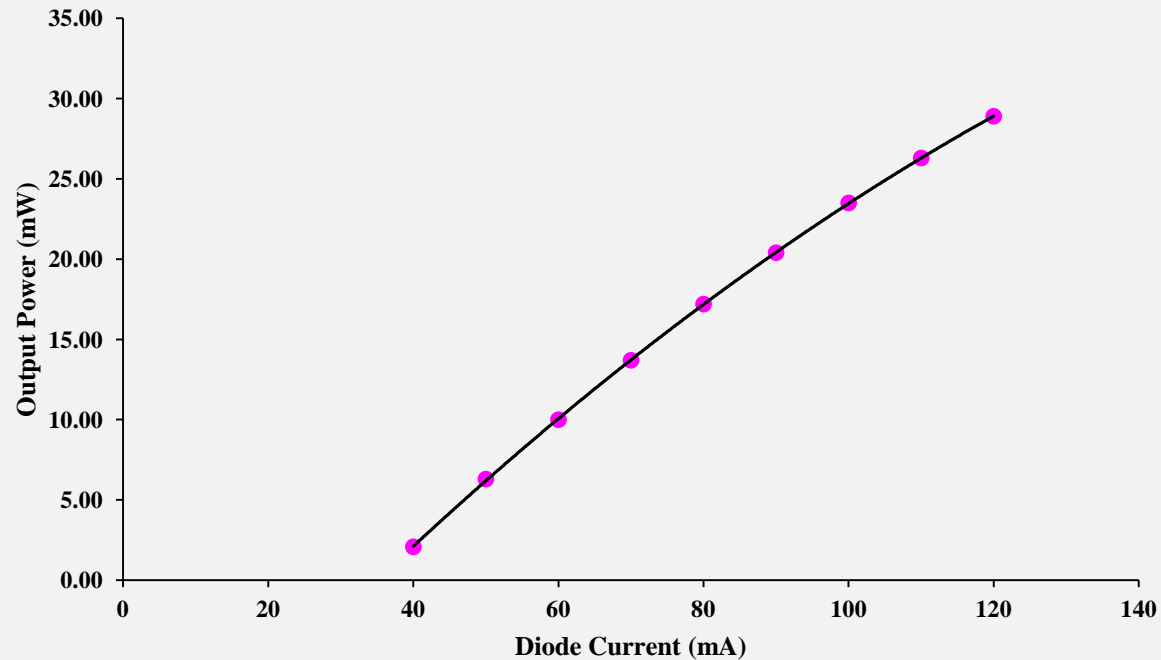
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Optical and Electrical Characteristics at 25 °C

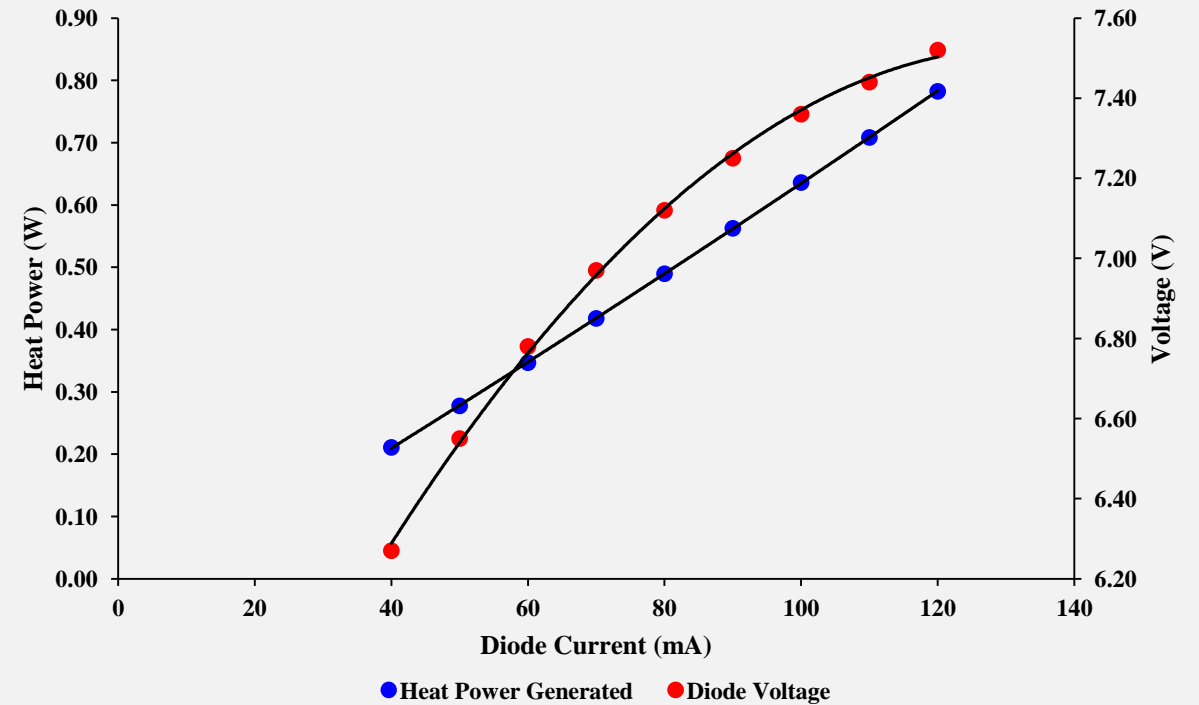
Parameter	Min	Typical	Max	Units	Test Condition
Threshold Current	-	30	60	mA	-
Operating Current	-	60	100	mA	$P_o = 10 \text{ mW}$
Operating Voltage	-	5.4	7.0	V	$P_o = 10 \text{ mW}$
Fast Axis Beam Divergence	34	39	45	°	$P_o = 10 \text{ mW}$ 1/e ² Full Angle
Slow Axis Beam Divergence	9	12	16	°	$P_o = 10 \text{ mW}$ 1/e ² Full Angle
Lasing Wavelength	510	515	530	nm	$P_o = 10 \text{ mW}$
Transverse Mode	STM	STM	STM	-	All Currents
Polarization TE	-	-	-	-	Horizontal

Module Experimental Data

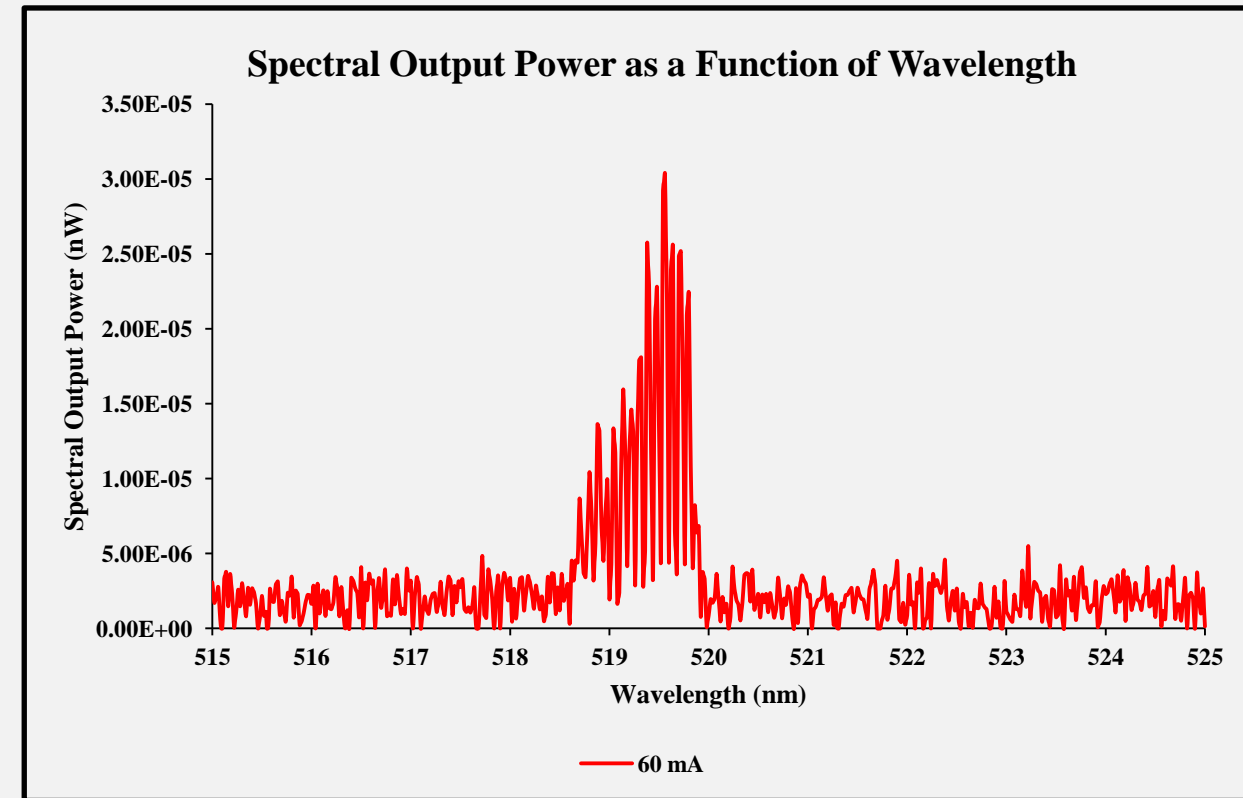
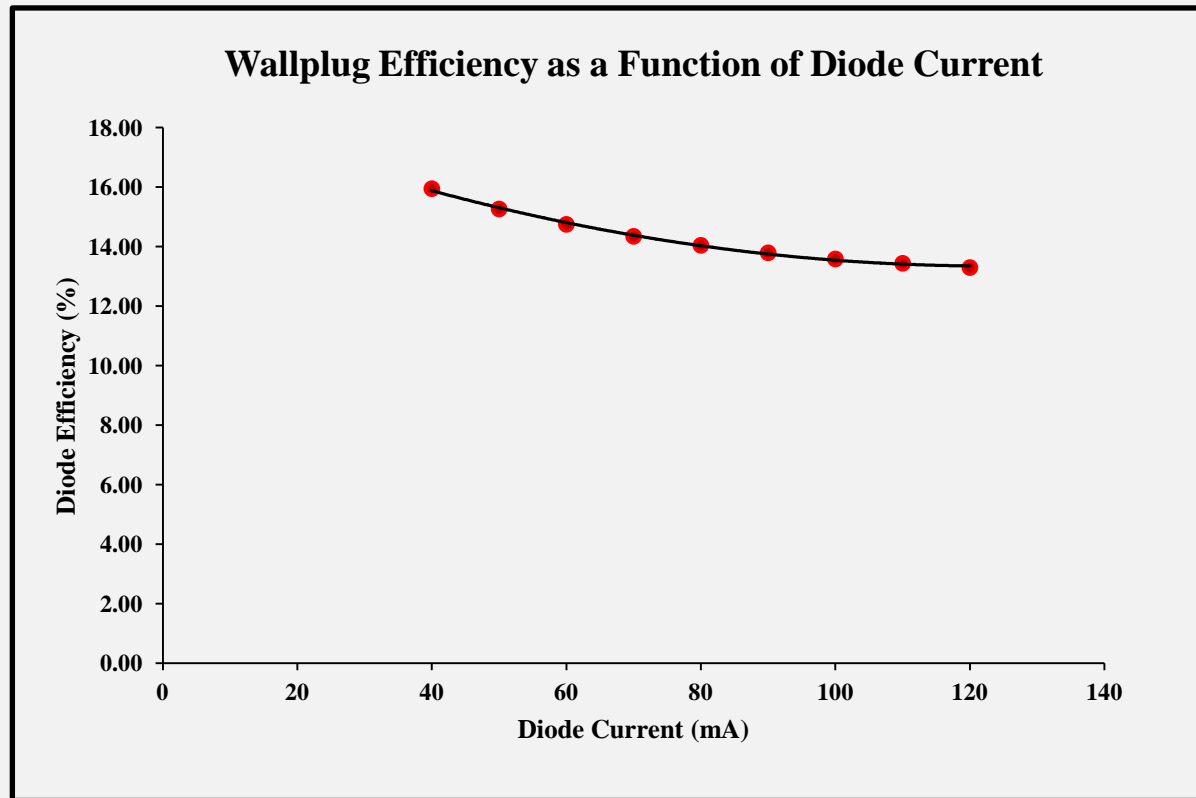
Output Power as a Function of Diode Current



Heat Power and Voltage as a Function of Diode Current

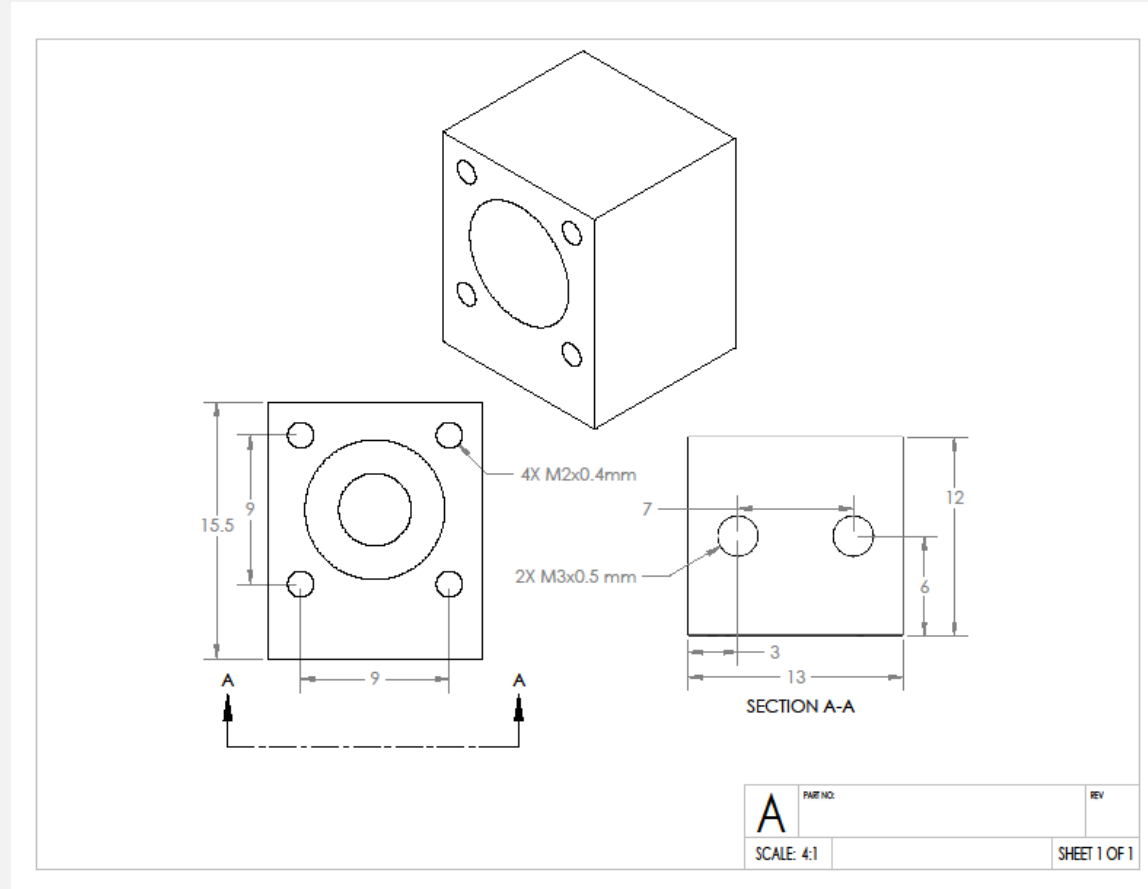


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Module Dimensions and Mounting Screws





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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 3B laser product.**
- **Always use laser safety glasses with sufficient Neutral Density at the operating wavelength of 510 nm to protect your eyes.**
- **Skin exposure to this laser product should be avoided.**