Model Number: APS-450nm-80mW-STM-5.6mm-CC

APS 80 mW 450 nm Laser Diode Module With Adjustable Aspheric Collimating Lens

Absolute Maximum Ratings at 25 °C

Item	Ratings	Unit
CW Output Power	80	mW
Laser Diode Reverse Voltage	2	V
Maximum Operating Current	145	mA
Operating Temperature	-40 to 70	°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: Biomedical, Metrology, Laser Projector, Laser Shows

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www.advancedphotonicsciences.com
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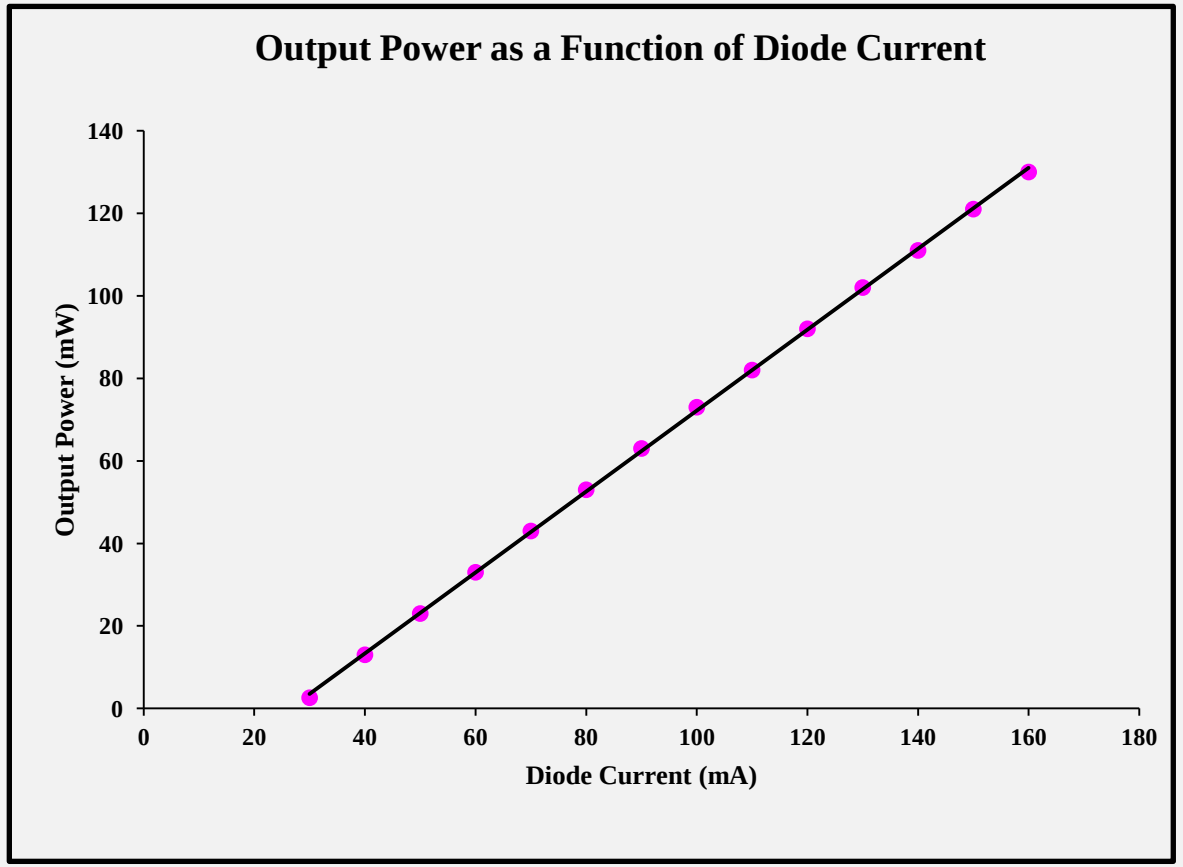
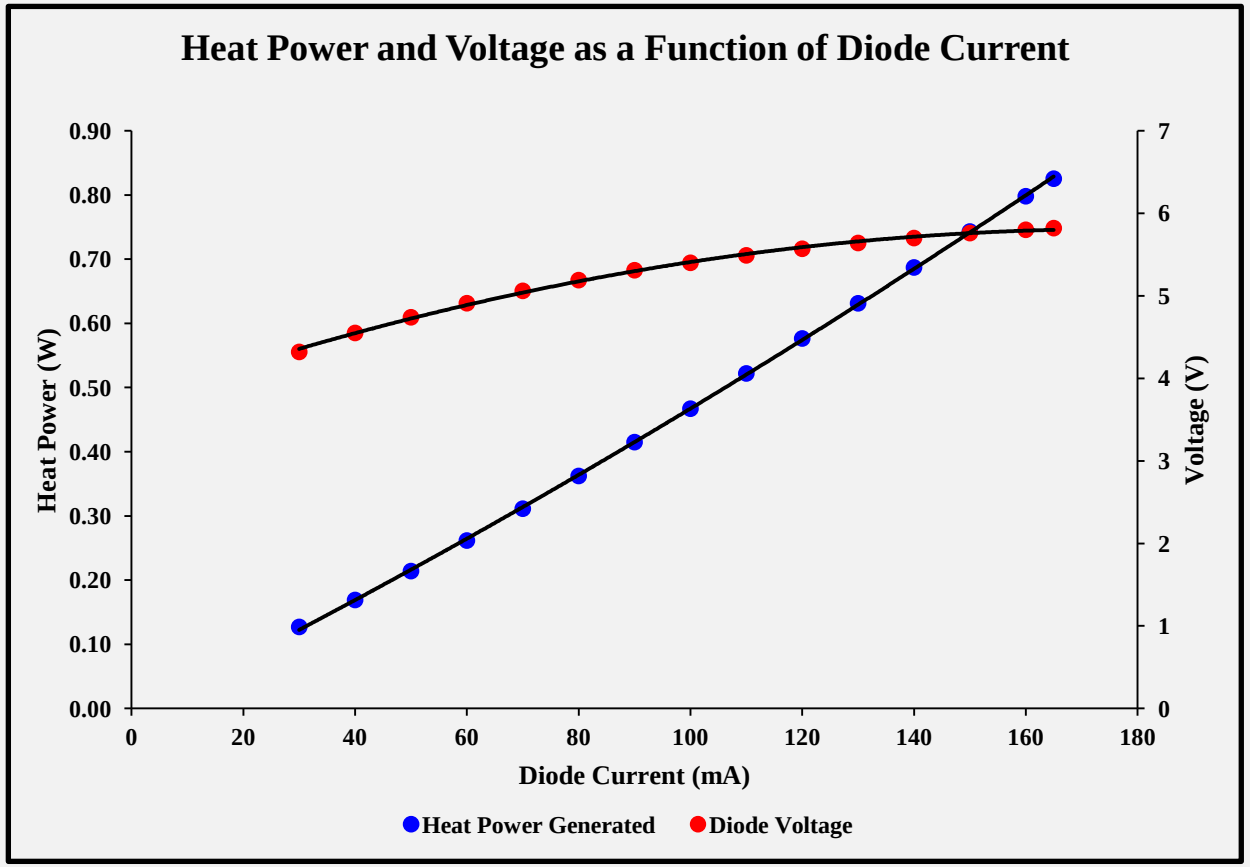
Optical and Electrical Characteristics at 25 °C

Parameter	Min	Typical	Max	Units	Test Condition
Threshold Current	-	30	60	mA	-
Operating Current	-	100	145	mA	P_o = 80 mW
Operating Voltage	-	5.8	7.0	V	P_o = 80 mW
Fast Axis Beam Divergence	32	40	45	°	P_o = 80 mW $1/e^2$ Full Angle
Slow Axis Beam Divergence	7	13	20	°	P_o = 80 mW $1/e^2$ Full Angle
Lasing Wavelength	440	450	460	nm	P_o = 80 mW
Transverse Mode	STM	STM	STM	-	All Currents
Polarization TE	-	-	-	-	Horizontal

Model Number: APS-450nm-80mW-STM-5.6mm-CC

Module Experimental Data





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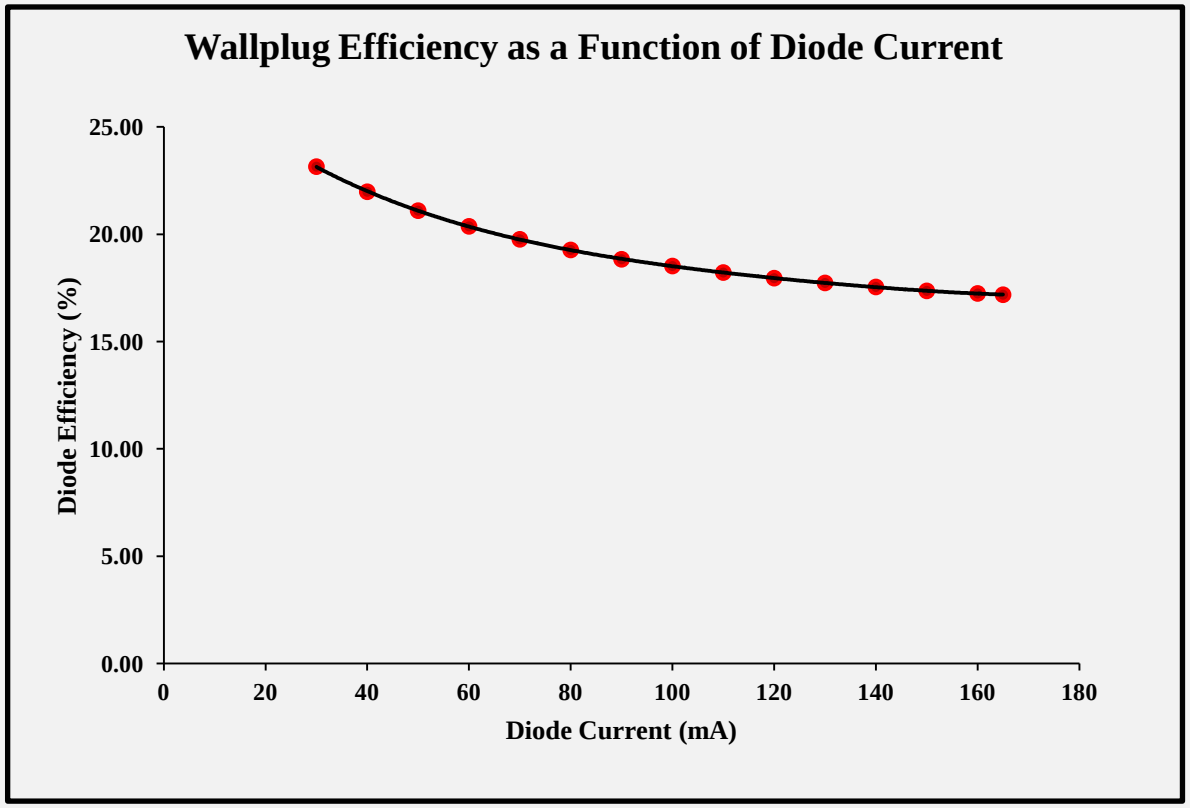

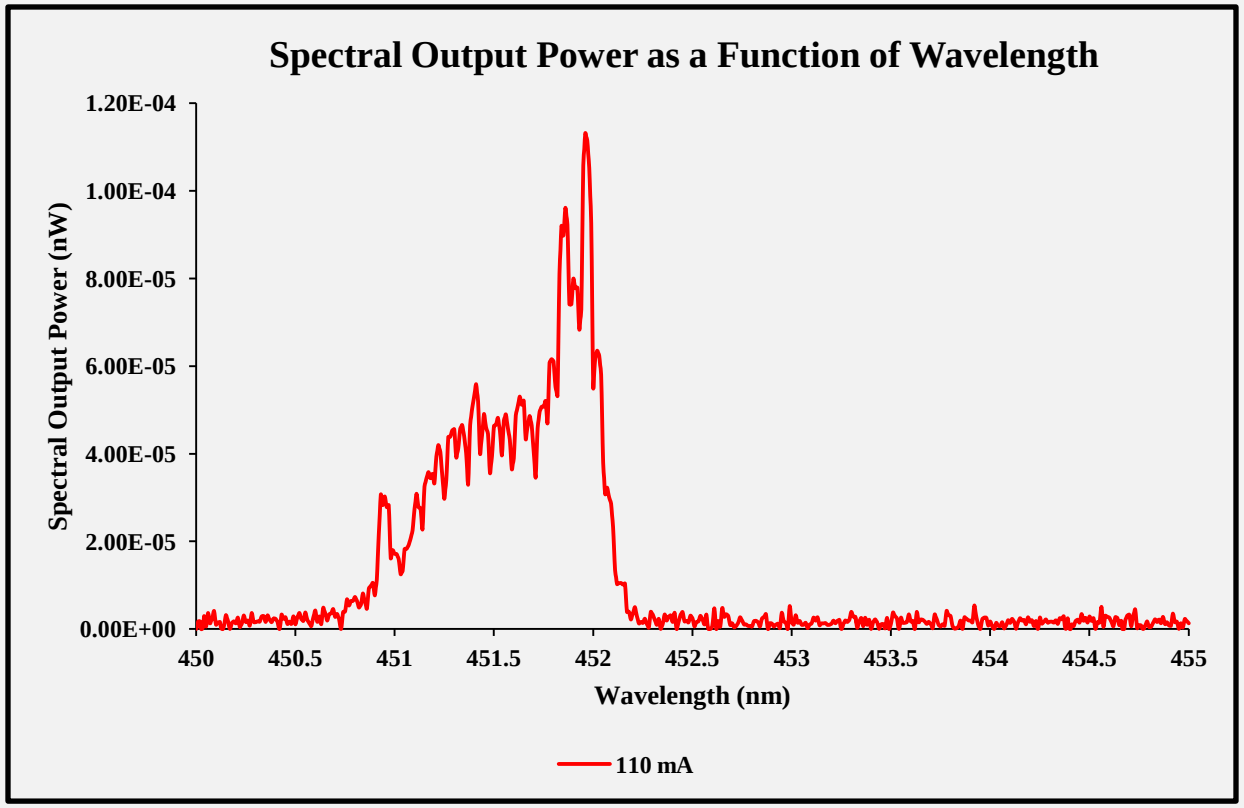

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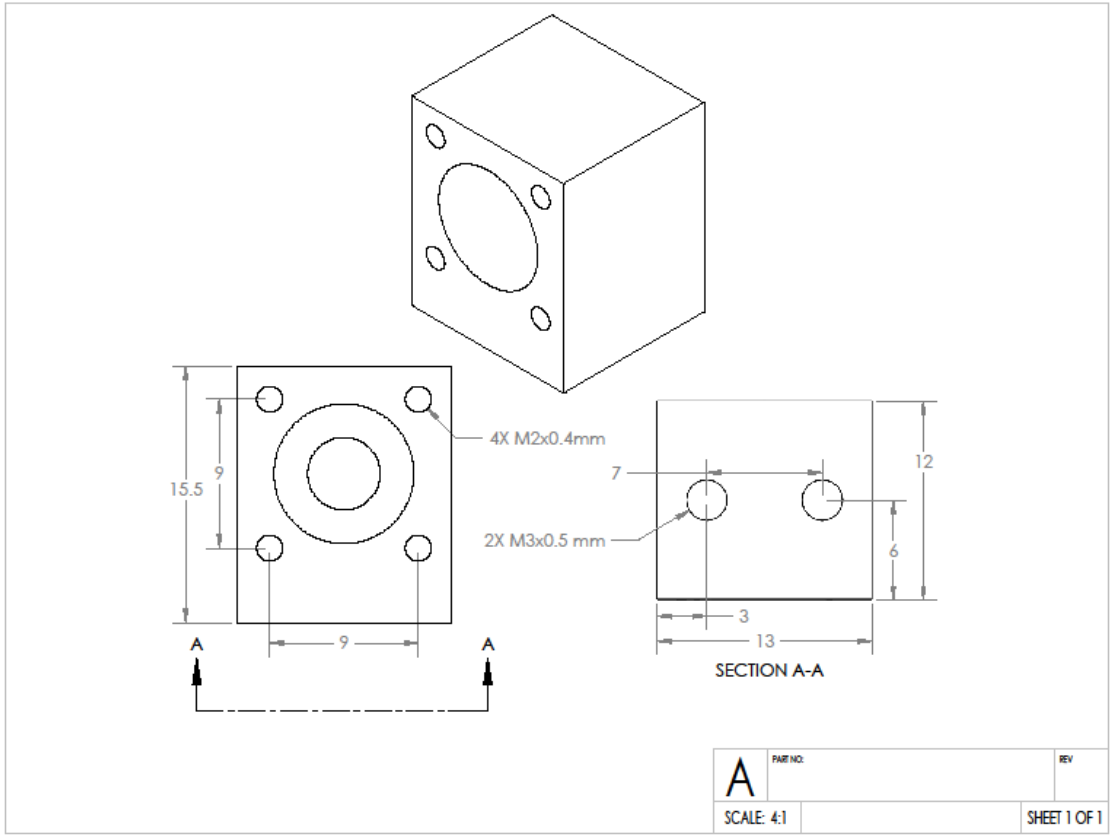
Module Dimensions and Mounting Screws



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 450 nm to protect your eyes.**
- **Skin exposure to this laser product should be avoided.**