

PART NUMBER: UMB800C100
LASER DIODE BAR

FEATURES AND BENEFITS

- Excellent Solderability
- Available With Any Microchannel Cooled Configuration
- Lot Tested
- Available Wavelengths (790-980nm)

OPTICAL CHARACTERISTICS

Parameter	Conditions	Typical	Units
CW Power Output	112A at 25°C Heat Sink	100	W
Operating Current	100W at 25°C Heat Sink	112	A
Threshold Current	25°C Heat Sink	16	A
Slope Efficiency	25°C Heat Sink	1.05	W/A
Efficiency	100W at 25°C Heat Sink	50	%
Number of Emitters	—	25	
Emitter Size	—	200x1	µm
Emitter Pitch	—	365	µm
Center Wavelength	100W at 25°C Heat Sink	808	nm
Wavelength Tolerance	100W at 25°C Heat Sink	+/-3	nm
Spectral Width	100W at 25°C Heat Sink	1.5	nm
Wavelength Shift	—	0.25	nm/°C
Beam Divergence FWHM	—	40x10	°x°
Polarization	—	TE	

ELECTRICAL CHARACTERISTICS

Parameter	Conditions	Typical	Units
Series Resistance	25°C Heat Sink	0.002	ohms
Operating Voltage	25°C Heat Sink, 100W	1.8	V

MECHANICAL CHARACTERISTICS

Parameter	Typical
Bar Width	9.6 mm
Bar Thickness	135 µm
Bar Cavity Length	2000 µm

NOTES

- (1) These specifications apply for operation at 808nm. Other wavelengths available upon request.
- (2) A dry nitrogen environment should be provided by the user when storing and operating at temperatures below ambient dew point.

100W CW

NORTHROP GRUMMAN

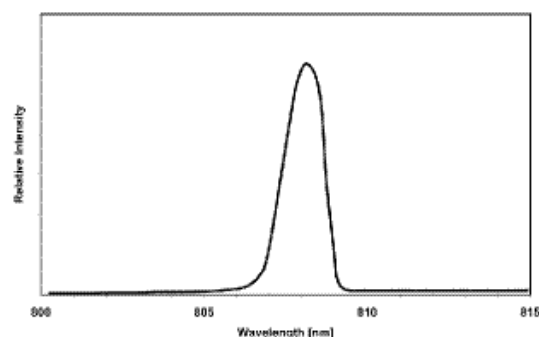
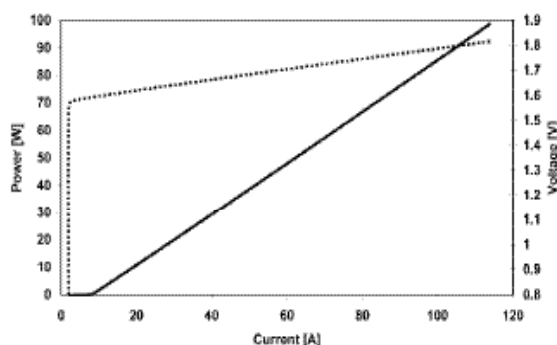
ABSOLUTE MAXIMUM RATINGS

Parameter	Conditions
Reverse Current	0 A
Reverse Voltage	0 V
Operating Temperature Range	-40°C to 70°C
Storage Temperature Range	-40°C to 85°C

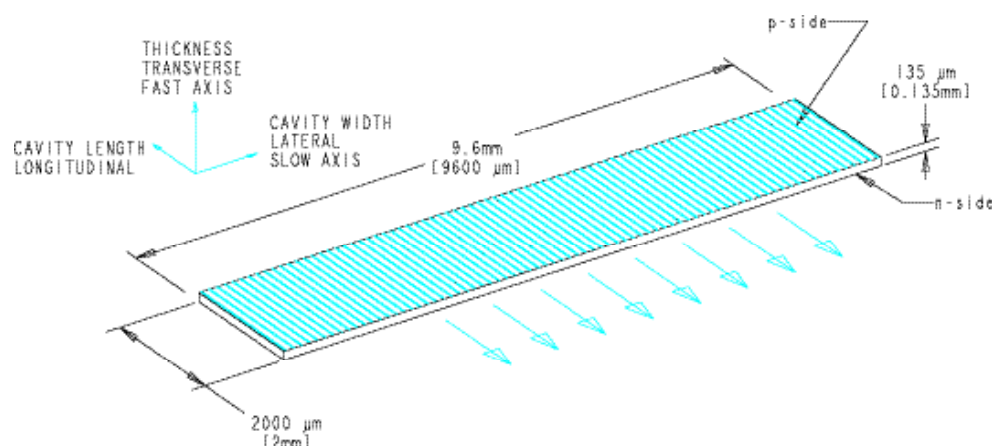
SOLDERING CHARACTERISTICS

Parameter	Conditions
Metalization	1000 Å Au over Pt barrier

OPTICAL CHARACTERISTICS (TYPICAL)



MECHANICAL CHARACTERISTICS



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