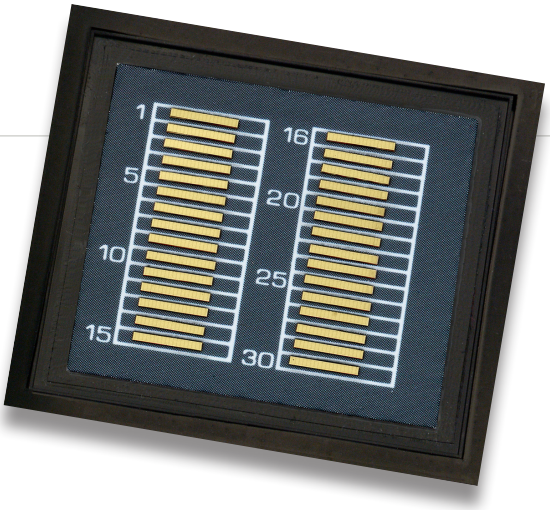
LASER DIODE BARS

40W CW

NORTHROP GRUMMAN



PART NUMBER: UMB500C040

LASER DIODE BAR

FEATURES AND BENEFITS

- Excellent Solderability

- Available With Any Golden Bullet® Configuration

- Lot Tested

- Available Wavelengths (790-980nm)

OPTICAL CHARACTERISTICS

Parameter	Conditions	Min	Typ	Units
CW Power Output	50A at 25˚C Heat Sink	40	—	W
Operating Current	40W at 25˚C Heat Sink	—	50	A
Threshold Current	25˚C Heat Sink	—	13	A
Slope Efficieny	25˚C Heat Sink	—	1.1	W/A
Efficieny	40W at 25˚C Heat Sink	—	45	%
Number of Emitters	—	—	50	
Emitter Size	—	—	100x1	µm
Emitter Pitch	—	—	185	µm
Center Wavelength	40W at 25˚C Heat Sink	—	808	nm
Wavelength Tolerance	40W at 25˚C Heat Sink	—	+/-3	nm
Spectral Width	40W at 25˚C Heat Sink	—	1.6	nm
Wavelength Shift	—	—	0.25	nm/˚C
Beam Divergence FWHM	—	—	40x10	˚x˚
Polarization	—	—	TE	

ELECTRICAL CHARACTERISTICS

Parameter	Conditions	Min	Typ	Units
Series Resistance	25˚C Heat Sink	—	0.003	ohms
Operating Voltage	25˚C Heat Sink, 40W	—	1.8	V

MECHANICAL CHARACTERISTICS

Parameter	Typical
Bar Width	9.6 mm
Bar Thickness	135 µm
Bar Cavity Length	1200 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.

光技術をサポートする
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40W CW

NORTHROP GRUMMAN

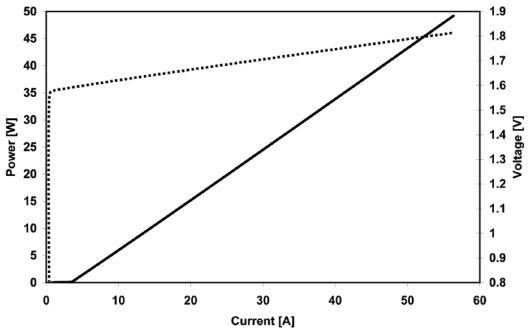
ABSOLUTE MAXIMUM RATINGS

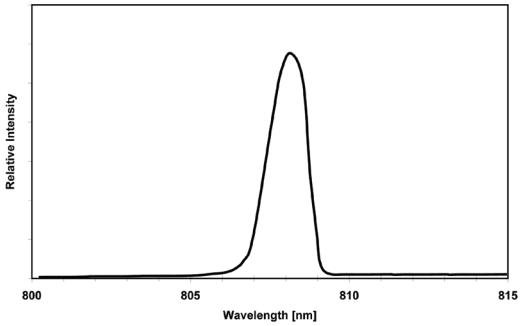
Parameter	Conditions
Reverse Current	0 A
Reverse Voltage	0 V
Operating Temperature Range	-40˚C to 70˚C
Storage Temperature Range	-40˚C to 85˚C

SOLDERING CHARACTERISTICS

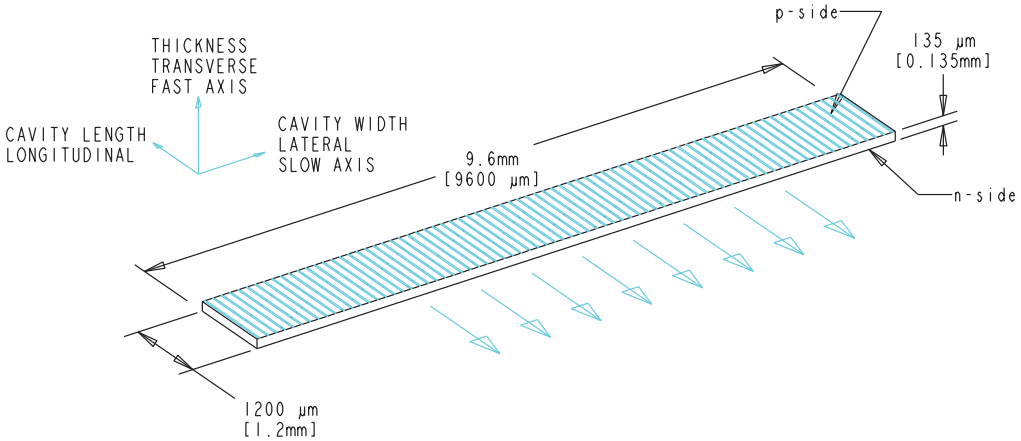
Parameter	Conditions
Metalization	1000 Å Au over Pt barrier

OPTICAL CHARACTERISTICS (TYPICAL)





MECHANICAL CHARACTERISTICS



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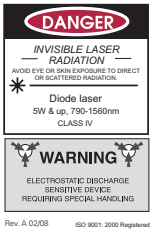

Rev. A 02/08 ISO 9001: 2000 Registered