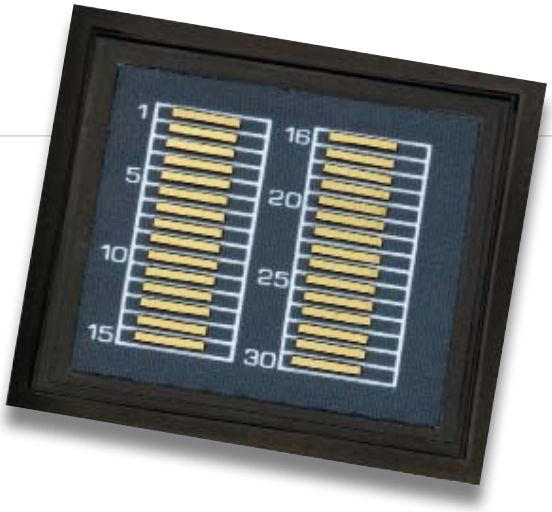
LASER DIODE BARS

20W CW

NORTHROP GRUMMAN



PART NUMBER: UMB200C020

LASER DIODE BAR

FEATURES AND BENEFITS

- Excellent Solderability

- Available With Any Silver or Golden Bullet® Configuration

- Lot Tested

- Available Wavelengths (790-980nm)

OPTICAL CHARACTERISTICS

Parameter	Conditions	Typical	Units
CW Power Output	25A at 25˚C Heat Sink	20	W
Operating Current	20W at 25˚C Heat Sink	25	A
Threshold Current	25˚C Heat Sink	8	A
Slope Efficiency	25˚C Heat Sink	1.15	W/A
Efficiency	20W at 25˚C Heat Sink	47	%
Number of Emitters	—	46	
Emitter Size	—	80x1	µm
Emitter Pitch	—	200	µm
Center Wavelength	20W at 25˚C Heat Sink	808	nm
Wavelength Tolerance	20W at 25˚C Heat Sink	+/-3	nm
Spectral Width	20W at 25˚C Heat Sink	1.8	nm
Wavelength Shift	—	0.25	nm/˚C
Beam Divergence FWHM	—	38x7	˚x˚
Polarization	—	TE	

ELECTRICAL CHARACTERISTICS

Parameter	Conditions	Typical	Units
Series Resistance	25˚C Heat Sink	0.004	ohms
Operating Voltage	25˚C Heat Sink, 20W	1.7	V

MECHANICAL CHARACTERISTICS

Parameter	Typical
Bar Width	9.6 mm
Bar Thickness	135 µm
Bar Cavity Length	1000 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.

20W CW

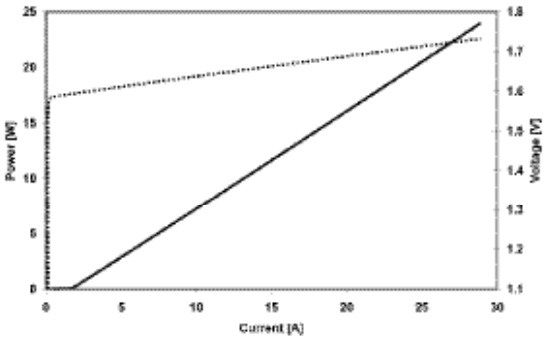
ABSOLUTE MAXIMUM RATINGS

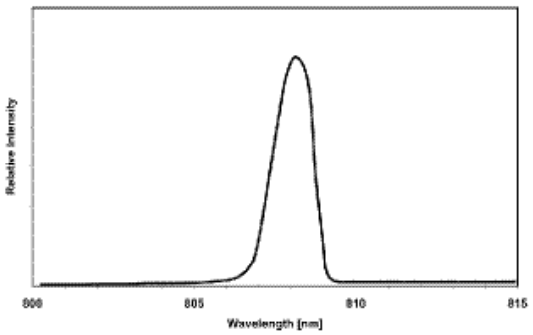
Parameter	Conditions
Reverse Current	0 A
Reverse Voltage	0 V
Operating Temperature Range	-40˚C to 70˚C
Storage Temperature Range	-40˚C to 85˚C

SOLDERING CHARACTERISTICS

Parameter	Conditions
Metalization	1000 Å Au over Pt barrier

OPTICAL CHARACTERISTICS (TYPICAL)





MECHANICAL CHARACTERISTICS