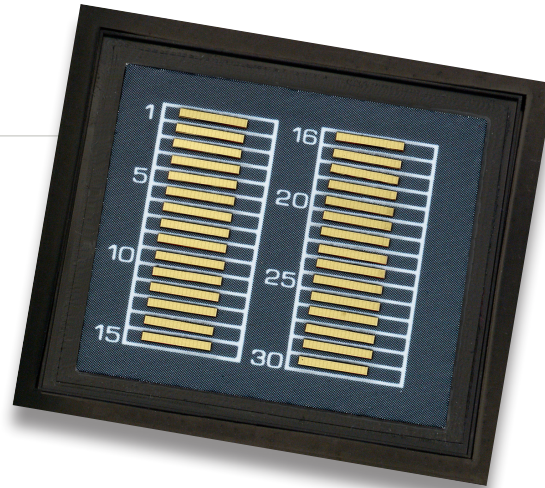


PART NUMBER: UMB700P100
LASER DIODE BAR

FEATURES AND BENEFITS



- Excellent Solderability

- Available With Any Golden Bullet® Configuration

- Lot Tested

- Available Wavelengths (790-980nm)

OPTICAL CHARACTERISTICS

Parameter	Conditions	Min	Typ	Units
QCW Power Output	98A at 25°C Heat Sink	100	—	W
Operating Current	100W at 25°C Heat Sink	—	98	A
Threshold Current	25°C Heat Sink	—	15	A
Slope Efficiency	25°C Heat Sink	—	1.2	W/A
Efficiency	100W at 25°C Heat Sink	—	55	%
Number of Emitters	—	—	52	
Emitter Size	—	—	150x1	µm
Emitter Pitch	—	—	180	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	—	2.0	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	—	0.002	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	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.



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100W QCW

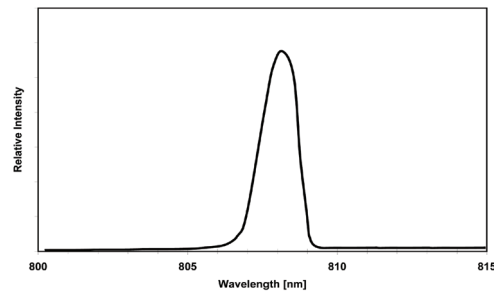
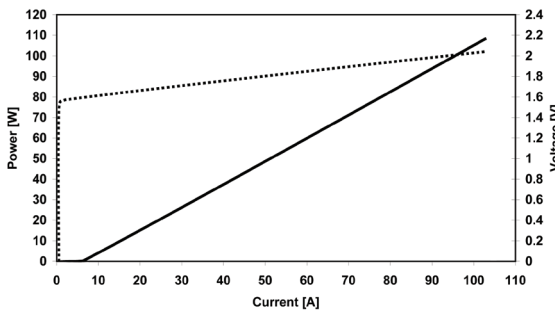
> ABSOLUTE MAXIMUM RATINGS

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

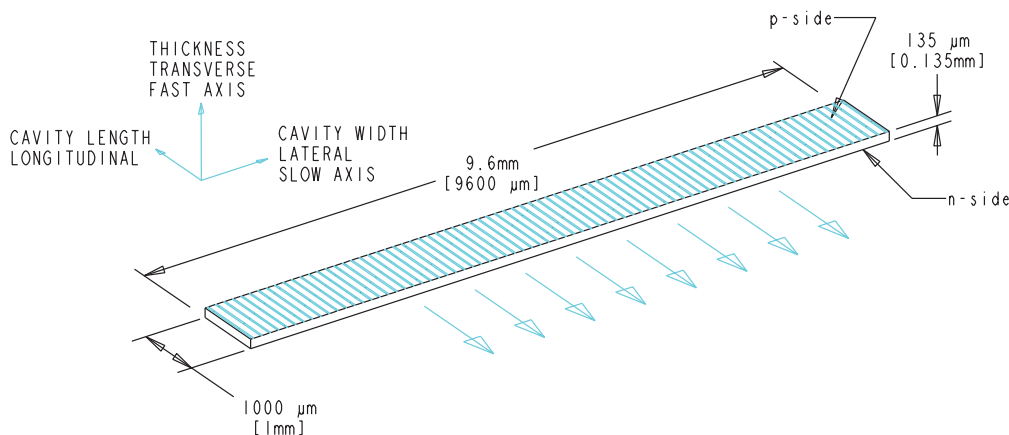
> SOLDERING CHARACTERISTICS

Parameter	Conditions
Metalization	1000 Å Au over Pt barrier

> OPTICAL CHARACTERISTICS (TYPICAL)



> MECHANICAL CHARACTERISTICS



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⚠ DANGER ⚠

INVISIBLE LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION

* Diode laser
SW & LD, 790-1560nm
CLASS IV

⚠ WARNING ⚠

ELECTROSTATIC DISCHARGE SENSITIVE DEVICE
REQUIRING SPECIAL HANDLING

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