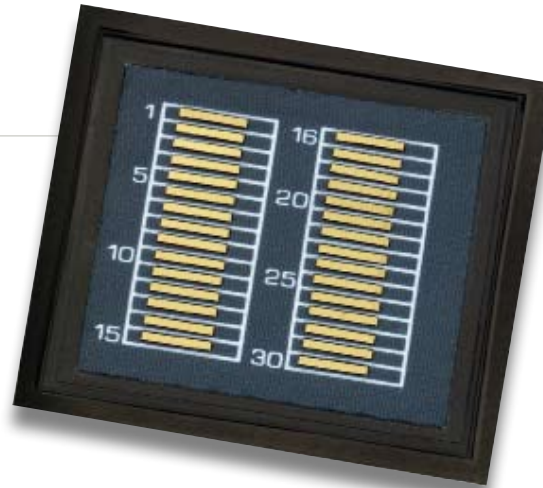


PART NUMBER: UMB700P100  
LASER DIODE BAR



#### > FEATURES AND BENEFITS

- Excellent Solderability
- Available With Any Golden Bullet® Configuration
- Lot Tested
- Available Wavelengths (790-980nm)

#### > OPTICAL CHARACTERISTICS

Parameter	Conditions	Typical	Units
QCW Power Output	95A at 25°C Heat Sink	100	W
Operating Current	100W at 25°C Heat Sink	95	A
Threshold Current	25°C Heat Sink	15	A
Slope Efficiency	25°C Heat Sink	1.25	W/A
Efficiency	100W at 25°C Heat Sink	58	%
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	—	38x7	°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	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.

# 100W QCW

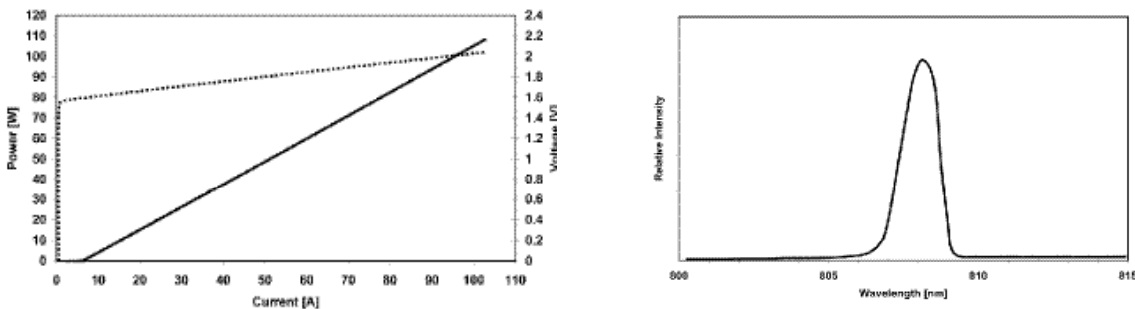
## ABSOLUTE MAXIMUM RATINGS

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

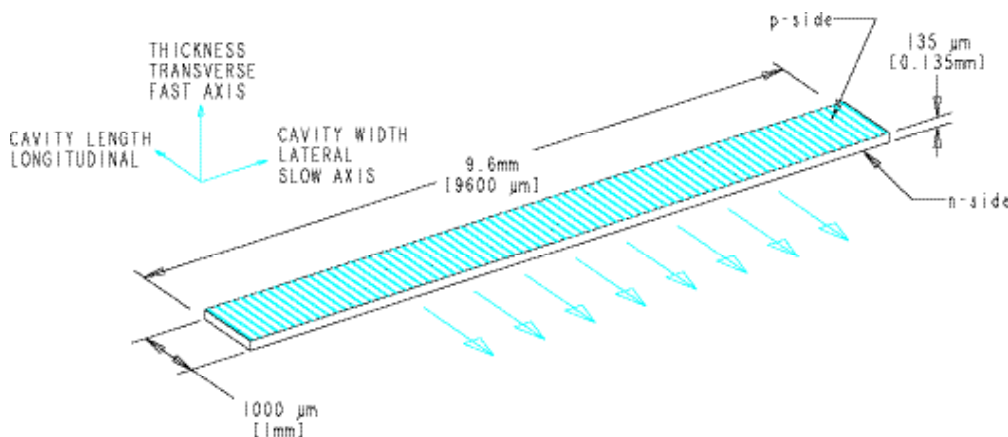
## SOLDERING CHARACTERISTICS

Parameter	Conditions
Metalization	1000 Å Au over Pt barrier

## OPTICAL CHARACTERISTICS (TYPICAL)



## MECHANICAL CHARACTERISTICS



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