Data Sheet



MCC Series 808nm 100W Single Bar Laser Diode Module

TY-808+/-10NM-100.0W-25C-MCC-CW



SkyEra delivers TY-808+/-10NM-100.0W-25C-MCC-CW micro-channel single Bar diode laser, employing AuSn bonding technology with multiple advantages of low smile, stable output power, high power, high efficiency, long lifetime, and high compatibility, and are widely applied in laser arrays and stacks.

The performance and aging tests have been performed upon the production line to ensure reliable, stable and long lifetime of products.

To provide customers with high-quality, high cost performance products is the company's goal.

Specification:

Functional parameters are tested at the temperature of the heat sink is 25 degree, contact resistance of the component and heat sink is less than 1 CM² K/W. Reduced lifetime if used above nominal operating conditions. A non-condensing environment is required for storage and operation below the ambient dew point.

Parameters	Min	Тур	Max	Unit	Conditions
Output Power	-	100	-	w	
Center Wavelength	-	-	-	-	
TY-MCC	-	808±10	-	nm	
Spectral Width (FWHM)	-	4.0	_	nm	
Spectral Width (90%)	-	5.0	-	nm	
Fax-Axis Divergence(FWHM)	-	28	_	o	
Slow-Axis Divergence (FWHM)	-	8	_	o	
Pitch	-	200	_	μm	
Emitter Width	-	100	-	μm	
Emitter Number	-	47		-	
Wavelength Shift vs. Temperature	-	0.3	-	nm/°C	
Polarization Mode	-	TE	-	-	
Threshold Current	-	18.5	22	А	
Operating Current	-	11.0	120	А	
Operating Voltage	-	1.8	2.2	V	
Power Conversion Efficiency	-	60.0	-	%	
Slope Efficiency	-	1.10	-	W/A	
Storage Temperature	0	-	55	°C	
Operating Temperature	15	-	35	°C	
Recommended Heatsink Capacity	-	Water cooling	-	-	

Features:

- MCC Single Bar package
- High output power 100W(CW)
- High stability
- Long lifetime
- Low smile
- AuSn bonding
- Bar to bar space 2.1mm
- RoHS compliance

Application:

- Medical
- Industry
- Pumping

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2. Dimension Diagram



3. Instructions

- Avoid eyes or skin exposure to direct or scattered radiation;
- ESD protection is required for transportation, storage and operation;
- Drive constant current power supply by laser and avoid surge while working;
- The device shall be used under the rated current and rated power;
- Good heat dissipation is required;
- Please cool the device with purified water with particle diameter less than 50um under a flow rate of 4L/min;
- Please discharge the retained water in micro channel when you do not use the device for a long period of time;
- Operating temperature $15^{\circ}C^{35}C$;
- Storage temperature $0^{\circ}C^{+}55^{\circ}C$.





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