

SAPIR Series

Peak Power 100 W per bar, conduction cooled stack

General Description

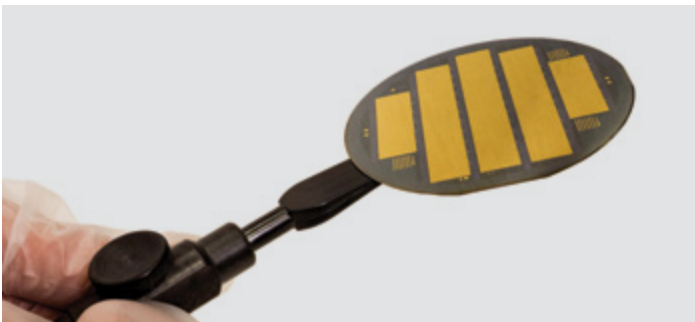
Over many years of development, SCD has become an established supplier of high-power laser bar and stack products in a broad wavelength range from 750 nm to 1100 nm, primarily for DPSSL pumping applications. Built upon SCD's RobustHead™ packaging technology and proprietary chip design, our laser diode arrays can be assembled in different configurations for QCW operation with peak powers in the kilowatt range. Special designs are available for CW operation and high-quality beam collimation with precision optics.

Main Features

- G-type platform
- Vertical stack for QCW operation
- >50% efficiency
- Wavelength: 808nm/940nm
- From 2 to 10 bars

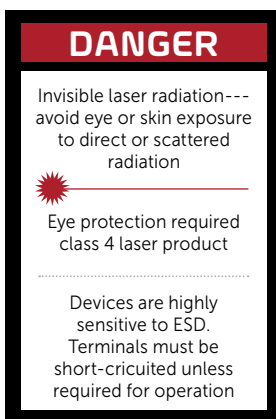
Applications

- Solid State Laser Pumping



Typical Performance

Product Name			Value
Diode Type			QCW
Output peak Power	W		700
Output Power per bar			100
Drive Current	A		110
Operating Voltage	V	≤	20
Conversion Efficiency	%	≥	52
Center Wavelength	nm		808
Spectral Width (FWHM)	nm	≤	4
Beam Divergence (FWHM)			35° x 10°
Emitting Area	mm		10 x 2.4
Duty Cycle	%		2
Number of Bars	#		7
Bar to Bar Pitch	mm		0.4
Heat Seak Temperature	°C		55



SCD reserves the right to change product design and specification at any time without notice. No responsibility is assumed for the use of these products, nor for any infringement on the right of others, resulting from the use of these products. Laser diode product components are intended for use in a user devised end system. However, these products are capable of emitting Class IV radiation. Extreme care must be exercised during their operation. Only persons familiar with the appropriate safety precaution should operate a laser product. Direct viewing of the laser beam exposure to specular reflections, must be avoided.

Serious injury may result, if any part of the body is exposed to the beam.

The eye is extremely sensitive to the infrared radiation and therefore, proper eyewear must be worn at all times.

Use of optical instruments with these products, may increase eye hazard. Always wear proper eye protection when operating.