50W 905nm QCW Single Emitter Laser Chip

50W 905m Single Emitter Laser Chip with QCW working mode. With pulse width, 100ns. Single-emitter laser diode (SE) chips are the basic building block for high-power and high-brightness semiconductor laser modules. This wavelength chip can be



used to make TO Mount.

Feature:

QCW working mode, high power 50W

Pulse Width is 100ns, Duty Cycle is 0.01%

3W/A Slope Efficiency

Single Emitter Laser Chip

Wide variety of bar configurations

Application:

Medicine: Aesthetics, dermatology and surgery

Direct Semiconductor Laser

Laser illumination

Autonomous Driving Lidar

Data Sheet

Item No: LC905SE50

Item Name: 50W 905nm QCW Single Emitter Laser Chip

Optical	Min	Тур	Max
Central Wavelength	890nm	905nm	920nm
Output Power		50W	
Working Mode		QCW	
Spectrum Width		4nm	
Emitter Width		135um	
Chip Width		400um	
Cavity Length	990um	1000um	1010um
Thickness	110um	130um	150um
Fast Axis Divergence(FWHM)		30deg	
Slow Axis Divergence (FWHM)		10deg	
Polarization Mode		TE	
Slope Efficiency	2.8W/A	3W/A	
Electrical			
Operating Current Iop		21A	23A
Threshold Current Ith		0.9A	
Operating Voltage Vop		6.3V	7V
Conversion Efficiency	35%	40%	
Pulse Width		100um	
Duty Cycle		0.01%	
Repetition Frequency		1000Hz	
Thermal			
Operating Temperature		25	
Wavelength Temperature Coefficient		0.31nm/	

Drawing:

