

12W 940nm Single Emitter Laser Chip

Single-Emitter laser diode (SE) chips are the basic building block for high-power and high-brightness semiconductor laser modules.

Quick Detail:

Output power: 12W, Central wavelength: 940nm

CW working mode, 100% power modulation

The conversion efficiency of our chip can reach 60%

Lifetime can be more than 10000 hours

New epitaxial structure design and material epitaxy

COS package available, High brightness and reliability

Application:

Solid-state laser pumping source

Direct semiconductor laser

Semiconductors for high-power diode lasers in direct material processing, for heating or lighting.



Data Sheet

Item No: LC940SE12

Item Name: 12W 940nm Single Emitter Laser Chip

Optical	Min	Typ	Max
Central Wavelength	930nm	940nm	950nm
Output Power		12W	
Working Mode		CW	
Power Modulation		100%	
Spectrum Width		4nm	
Emitter Width		90um	95um
Emitter Pitch	390um	400um	410um
Filling Factor		100%	
Cavity Length	3990	4000um	4010
Thickness	110um	130um	150um
Fast Axis Divergence(FWHM)		29Deg	
Slow Axis Divergence (FWHM)		9Deg	
Polarization Mode		TE	
Slope Efficiency		1W/A	
Electrical			
Operating Current Iop		13A	11A
Threshold Current Ith		0.7A	1A
Operating Voltage Vop		1.7V	2V
Conversion Efficiency	52%	56%	
Thermal			
Operating Temperature	15	25	35
Wavelength Temperature Coefficient		0.34nm/	

LIV Curve

