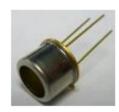


60W Pulsed Multi-Mode 975nm VCSEL Single Device Part # PSP-CS-60-W0975

- Vertical-Cavity Surface-Emitting Laser technology
- 60W pulsed multi-mode power at 975nm
- · Circular, low-diverging beam
- Custom wavelengths available (808-1064nm)



Optical & Electrical Characteristics

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
Pulsed Single-mode Power (1)	73A, 20C Heat-sink	60	70		W
Threshold current	20C Heat-sink		0.3	0.5	Α
Operating current	60W, 20C Heat-sink		61	73	Α
Operating voltage	60W, 20C Heat-sink		25	34	V
Differential resistance	60W, 20C Heat-sink		0.33	1	Ω
Slope efficiency	20C Heat-sink	0.9	1.05		W/A
Conversion efficiency	0.5W, 20C	40	45		%
Center wavelength	60W, 20C Heat-sink	965	975	985	nm
Wavelength shift	20C Heat-sink	0.060	0.065	0.070	nm/°C
Beam divergence (2)	60W, 20C Heat-sink		0.17	0.2	rad
Emission area diameter			300		microns

- <50nsec pulse
- Half-width, 1/e²

Ordering information

PSP - CS - 60 - W0975

Package type

BC=Die; CS=Chip-on-submount;
CM=C-mount; TO=TO-can

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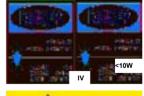
Wavelength (nm)

CW Output Power (W)

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No license is granted by implication or otherwise under any patents or patent right of Princeton Optronics. No responsibility is assumed for the use of these products, nor for any infringement on the rights 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 IIIB radiation. Extreme care must be exercised during their operation. Only persons familiar with the appropriate safety precautions should operate a laser product. Directly viewing the laser beam or 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 eye-wear must be worn at all times. Use of optical instruments with these products may increase eye hazard. Always wear eye protection when operating.





REV. A – 05/10

