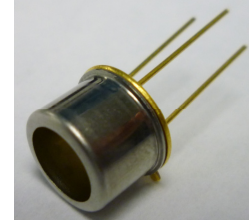


## 100mW Single-Mode 975nm VCSEL, TO-can Part # PSM-TO-100-W0975

- Vertical-Cavity Surface-Emitting Laser technology
- 100mW single-mode power at 980nm
- High-quality single transverse  $TEM_{00}$  mode ( $M^2 < 1.1$ )
- Single longitudinal mode, mode-hop free operation
- Custom wavelengths available (9xx-1064nm)

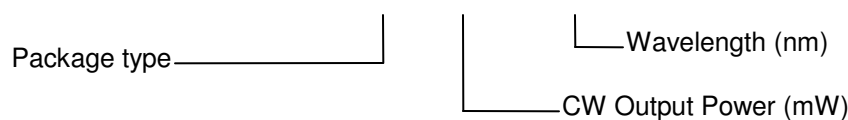


### Optical & Electrical Characteristics

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
CW Single-mode Power	320mA, 20C Heat-sink	100	110	--	mW
Threshold current	20C Heat-sink	--	210	250	mA
Operating current	100mW, 20C Heat-sink	--	300	320	mA
Operating voltage	100mW, 20C Heat-sink	--	3	3.5	V
Differential resistance	100mW, 20C Heat-sink	--	5	8	$\Omega$
Center wavelength	100mW, 20C Heat-sink	965	975	985	nm
Wavelength shift	25C Heat-sink	0.060	0.065	0.070	nm/ $^{\circ}$ C
Beam quality ( $M^2$ )	100mW, 20C Heat-sink	--	1.05	1.2	--
Beam waist (diameter)	100mW, 20C Heat-sink	--	50	--	microns

### Ordering information

PSM - TO - 100 - W0975

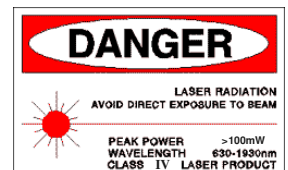


Copyright © 2010 Princeton Optronics, Inc.  
All Rights Reserved.

Princeton Optronics reserves the right to change product design and specifications at any time without notice.

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

Princeton Optronics, Inc. \* 1 Electronics Drive \* Mercerville, New Jersey 08619

Voice: (609) 584-9696 \* Fax: (609) 584-2448 \* E-mail: sales@princetonoptronics.com \* www.princetonoptronics.com