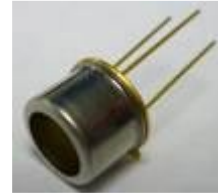


5mW Single-Mode 975nm VCSEL Part # PSM-TO-005-W0975

- Vertical-Cavity Surface-Emitting Laser technology
- 5 mW single-fundamental-mode power at 975nm
- 5 GHz modulation speed
- Custom wavelengths available (808-1064nm)



Optical & Electrical Characteristics

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
CW Single-mode Power	8.5mA, 20C Heat-sink	5	6	--	mW
Threshold current	20C Heat-sink	--	1.2	2	mA
Operating current	5mW, 20C Heat-sink	--	7.2	8.5	mA
Operating voltage	5mW, 20C Heat-sink	--	2.3	2.7	V
Differential resistance	5mW, 20C Heat-sink	--	127	200	Ω
Slope efficiency	20C Heat-sink	0.75	0.85	--	W/A
Conversion efficiency	2.2mW, 20C	30	36	--	%
Center wavelength	5mW, 20C Heat-sink	965	975	985	nm
SMSR ⁽¹⁾	5mW, 20C Heat-sink	-25	-30	--	dB
Wavelength shift	20C Heat-sink	0.060	0.065	0.070	nm/ $^{\circ}$ C
Beam divergence ⁽²⁾	5mW, 20C Heat-sink	--	16	20	$^{\circ}$
Modulation speed ⁽³⁾	5mW, 20C Heat-sink	4	5	--	GHz

(1) Side-Mode Suppression Ratio

(2) Full-width, $1/e^2$

(3) Small signal, 3dB bandwidth

Ordering information

PSM – TO – 005 – W0975

Package type _____ Wavelength (nm) _____
 BC=Die; CS=Chip-on-submount; _____
 CM=C-mount; TO=TO-can _____ CW Output Power (mW) _____

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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.



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