Laser Diodes

XM67-S0603-3N Rev 1.0

670nm VCSEL SMD Package

Features

- 670nm wavelength range
- Operatiing to over 50 °C
- Low current and voltage
- High reliability
- Other configurations available on request

Description

Applications

- Consumer electronics
- Position Sensors
- Medical Instruments
- Home Networking
- Data Link Communication, IEEE1394b
- Low power consumption application such as battery-operated equipment

Absolute Maximum Ratings

Parameter	Rating
Storage Temperature	-40 to 85 ℃
Operating Temperature	-20 to 50℃
Lead Solder Temperature	260 ℃, 5 sec
Continuous Forward Current	8mA
Continuous Reverse Voltage	5V (@10μA)

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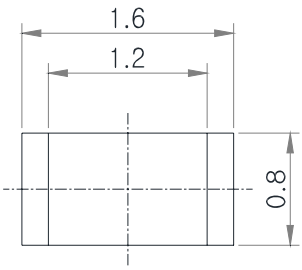
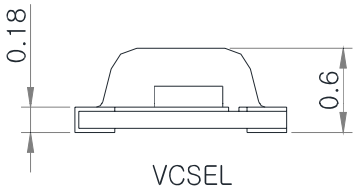
Dimensions

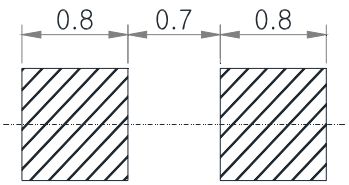
Unit :mm





VCSEL

For Reflow Soldering



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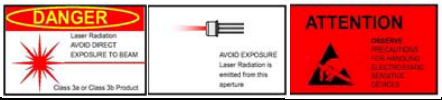
Electro-Optics Characteristics (T_a=25℃ unless otherwise stated)

Parameters	Symbol	Specified			Unit	Test Conditions
		Min.	Typ.	Max.		
Threshold Current	I_{th}		2	3.5	mA	CW
Slope Efficiency	η	0.2	0.4		W/A	I_f = 5mA
Optical Output Power	P_o		1.0		mW	I_f = 5mA
Peak Wavelength	λ	660	670	690	nm	I_f = 5mA
Spectral Bandwidth (RMS)	Δ λ			0.85	nm	I_f = 5mA
Beam Divergence	Θ	14		30	°	P0=1.0mW, (Full Width,1/e^2)
Operating Voltage	V_f		2.1	2.5	V	I_f = 5mA
Dynamic Resistance	R_d		60	90	Ohm	I_f = 5mA

Notes

* These specifications are subject to change without notice



NOTICE	The inherent design of this component causes it to be sensitive to electrostatic discharge(ESD). To prevent ESD-induced damage and/or degradation to equipment, take normal ESD precautions when handling this product
DANGER	The VCSEL is a class IIIb laser and should be treated as a potential eye hazard. Due to the size of the component, the applicable warning logotype, aperture label, and certification / identification label cannot be placed on the component itself.

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