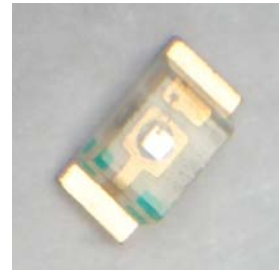




Features

- : Multi-mode 850nm VCSEL
- : 1.25 / 2.5 Gbps data rates
- : Low drive current and voltage
- : High reliability
- : Other configurations available on request

Description



Applications

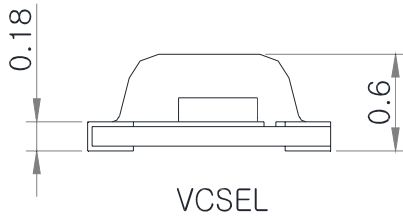
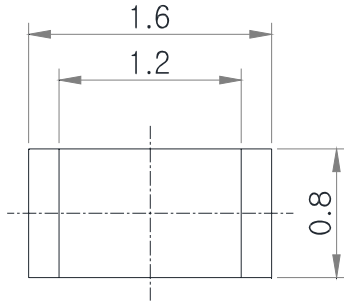
- : Consumer electronics
- : High speed Data Communications

Absolute Maximum Ratings

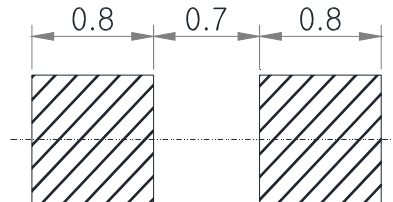
Parameter	Rating
Storage Temperature	-40 to 85 °C
Operating Temperature	0 to 85 °C
Lead Solder Temperature	260 °C, 5 sec
Continuous Forward Current	12mA
Continuous Reverse Voltage	5V (@10µA)

Dimensions

Unit :mm



For Reflow Soldering

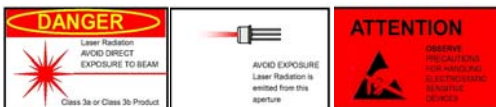


Electro-Optics Characteristics ($T_a=25^\circ\text{C}$ unless otherwise stated)

Parameters	Symbol	Specified			Unit	Test Conditions
		Min.	Typ.	Max.		
Threshold Current	I_{th}		1.5	3	mA	CW
I_{th} Temperature Variation	ΔI_{th}		1.5		mA	$T_a=0$ to 85°C at 7mA
Slope Efficiency	η	0.2	0.3	0.5	W/A	$I_f = 7$ mA
η Temperature Coefficient	$\Delta\eta / \Delta T$		-0.5		%/ $^\circ\text{C}$	$T_a=0$ to 85°C at 7mA
Optical Output Power	P_o		1.8		mW	$I_f = 7$ mA
Peak Wavelength	λ_P	840	850	860	nm	$I_f = 7$ mA
λ_P Temperature Coefficient	$\Delta \lambda / \Delta T$		0.06		nm/ $^\circ\text{C}$	$T_a = 0$ to 85°C at 7mA
Spectral Bandwidth (RMS)	$\Delta \lambda$			0.85	nm	$I_f = 7$ mA
Beam Divergence	Θ	14		30	$^\circ$	$P_o=1.8\text{mW}$, (Full Width, $1/e^2$)
Forward Voltage	V_f		1.8	2.3	V	$I_f = 7$ mA
Breakdown Voltage	V_b		-10		V	
Dynamic Resistance	R_d	20	35	70	Ohm	$I_f = 7$ mA

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.