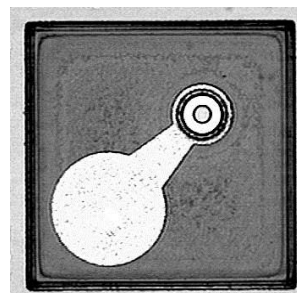




**Features**

- : 850nm wavelength range
- : Low current and voltage

**Description**



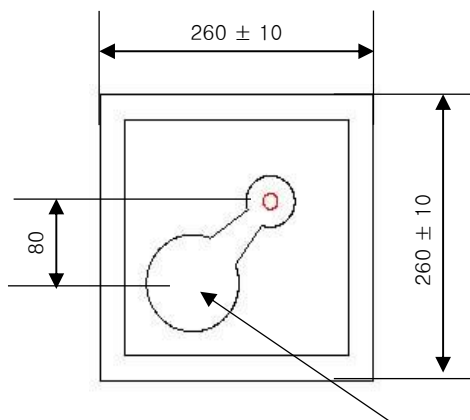
**Applications**

- : High speed Data Communications
- : Gigabit Ethernet
- : Fiber Channel

**Absolute Maximum Ratings**

Parameter	Rating
Storage Temperature	-40 to 100 °C
Operating Temperature	0 to 85 °C
Continuous Forward Current	10mA
Continuous Reverse Voltage	5V (@10µA)

**Absolute Maximum Ratings**



unit : µm

Die Height : 200±15µm

Anode bonding pad(Φ 95)

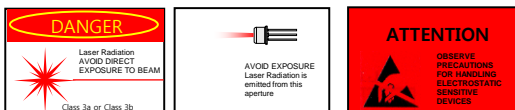


Parameters	Symbol	Specified			Unit	Test Conditions
		Min.	Typ.	Max.		
Threshold Current	$I_{th}$		1	2	mA	Cw
$I_{th}$ Temperature Variation	$\Delta I_{th}$		1.5		mA	$T_a=0$ to 85 °C
Slope Efficiency	$\eta$		0.3		W/A	$I_f = 7mA$
$\eta$ Temperature Variation	$\Delta \eta / \Delta T$		-0.5		%/ °C	$T_a=0$ to 85 °C at 7mA
Optical Output Power	$P_o$		2.0		mW	$I_f = 7mA$
Peak Wavelength	$\lambda$	840	850	860	nm	$I_f = 7mA$
$\lambda$ Temperature Variation	$\Delta \lambda / \Delta T$		0.06			$T_a=0$ to 85 °C at 7mA
Spectral Bandwidth (RMS)	$\Delta \lambda$			0.85	nm	$I_f = 7mA$
Beam Divergence	$\Theta$	14		30	°	$P_0= 2.0mW, ( Full Width, 1/e^2)$
Operating Voltage	$V_f$		2.1	2.4	V	$I_f = 7mA$
Breakdown Voltage	$V_b$		-10		V	
Dynamic Resistance	$R_d$		60	90	Ohm	$I_f = 7mA$



Notes

\* These specifications are subject to change without notice.



<b>NOTICE</b>	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
<b>DANGER</b>	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.