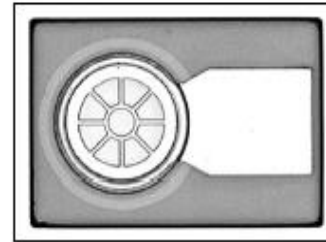


Features

- : 650 nm wavelength range
- : No threshold
- : Designed for POF data communications
- : Other configurations available on request

Description



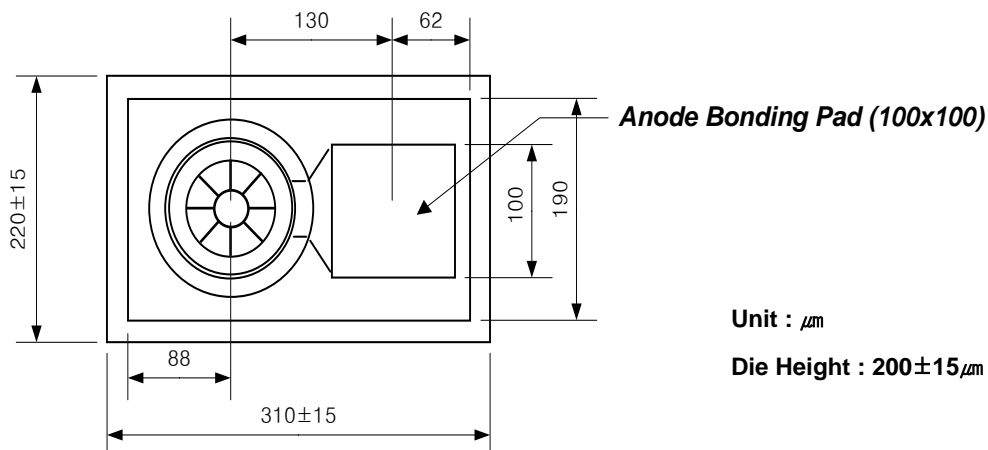
Applications

- : Data Link Communication
- : IEEE 1394.b
- : Home Networking
- : Sensors

Absolute Maximum Ratings

Parameter	Rating
Storage Temperature	-40 to 100 °C
Operating Temperature	-20 to 70 °C
Continuous Forward Current	30mA
Continuous Reverse Voltage	5V (@10µA)

Dimensions





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

Parameters	Symbol	Specified			Unit	Test Conditions
		Min.	Typ.	Max.		
Total Radiant Flux	Φ _o		1	1.5	mW	I _f =20mA *
Radiant Intensity	P _o	0.2	0.3		mW/sr	I _f =20mA**
Peak Wavelength	λ _p	640	650	660	nm	I _f =20mA**
Spectral Width	Δλ		7		nm	T _a =0 to 70°C at 20mA**
Beam Divergence	Θ		90		Deg.	I _f =20mA, FWHM
Forward Voltage	V _f		2.0	2.2	V	I _f =20mA
Rise Time / Fall Time	t _R /t _F		3/3		ns	I _f =20mA, (10% - 90%)
Data Rate	T _{Data}		155		Mbps	I _f =20mA

Test Data were measured in TO header of wire bonded chip

* Measured in integrating sphere

** Measured in axial direction (0.01sr)

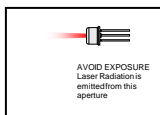
*** Value is referenced to the vender's measurement system (correlation to customer product is required).

Thermal Characteristics

Parameters	Symbol	Specified			Unit	Test Conditions
		Min.	Typ.	Max.		
P _o Temp Coefficient	ΔP _o / ΔT		-0.6		%/ °C	-20°C ~ 70°C at I _f =20mA
λ _p Temp Coefficient	Δλ / ΔT		0.07		nm/°C	-20°C ~ 70°C at I _f =20mA

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.

Characteristics Curves

