



6Gbps Multi-Mode 850nm VCSEL Chip

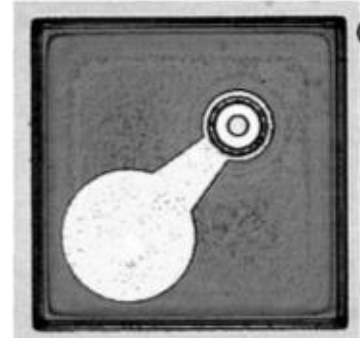
Part No. VCC-85A6G

Features

- 850nm VCSEL chip
- High data rate 6Gbps
- Low current operation and voltage

Applications

- High speed Data communications
- Gigabit ethernet
- Fiber channel



Specifications

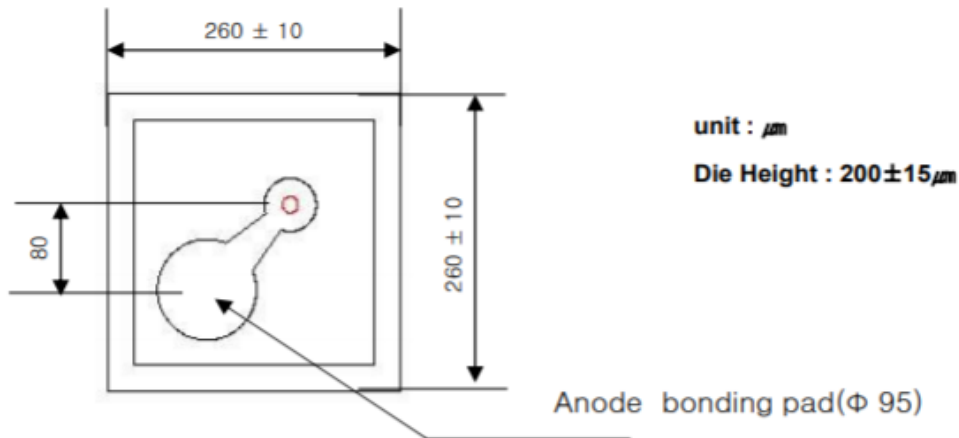
Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage Temperature	-40	100	°C	
Operating Temperature	0	85	°C	
Continuous Forward Current		10	mA	
Continuous Reverse Voltage		5	V	10uA

Electro-Optical Characteristics (T _a =25°C unless otherwise stated)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Threshold Current	I _{th}		1	2	mA	CW
Slope Efficiency	η		0.3		W/A	I _f =7mA
Optical Output Power	P _o		2.0		mW	I _f =7mA
Peak Wavelength	λ _P	840	850	860	nm	I _f =7mA
Spectral Bandwidth (RMS)	Δλ			0.85	nm	I _f =7mA
Beam Divergence	Θ	14		30	°	P ₀ =1.8mW, (Full Width, 1/e ²)
Forward 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

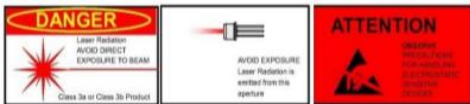
Thermal Characteristics						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
I _{th} Temperature Variation	ΔI _{th}		1.5		mA	T _a =0 to 85°C
η Temperature Coefficient	Δη/ΔT		-0.5		%/°C	T _a =0 to 85°C, I _f =7mA
λ Temperature Coefficient	Δλ/ΔT		0.06		nm/°C	T _a =0 to 85°C, I _f =7mA



Outline Dimensions



Additional Notes



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.

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.

Note: Specifications are subject to change without notice.