



1.25/2.5Gbps Multimode 850nm VCSEL Chip VCC-85A2G

Data Sheet

Features

- 850nm VCSEL chip
- High data rate 1.25/2.5Gbps
- Low current operation available
- High reliability

Applications

- High speed Data communications
- Gigabit ethernet
- Fiber channel

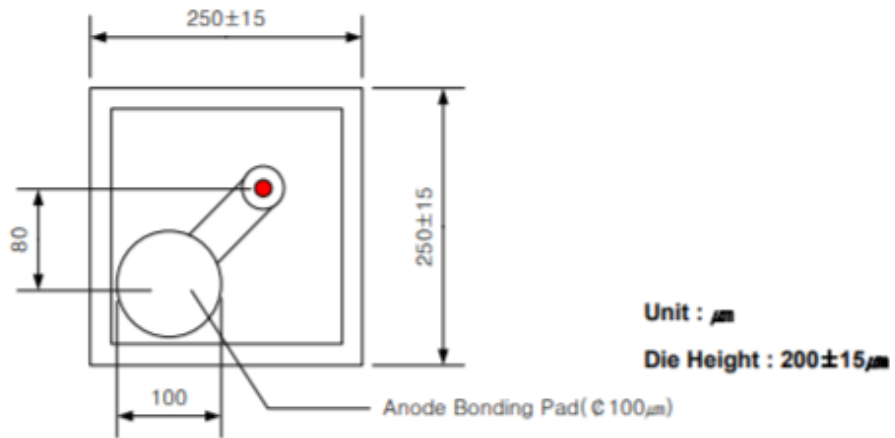
Specifications

Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage Temperature	-40	100	°C	
Operating Temperature	0	85	°C	
Continuous Forward Current		12	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}		1.5	3	mA	CW
Slope Efficiency	η	0.2	0.3	0.5	W/A	I _f =7mA
Optical Output Power	P _o		1.8		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		1.8	2.2	V	I _f =7mA
Breakdown Voltage	V _b		-10		V	
Dynamic Resistance	R _d	20	35	55	Ohm	I _f =7mA
Rise and Fall Times	t _r /t _f			110	ps	20% to 80%

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.
- Specifications are subject to change without notice.