VCC-94A350H
940nm 350mW VCSEL Chip for Sensor

Data Sheet

Features

- 940nm multi-emitter VCSEL chip
- 350mW pulsed
- Multimode beam profile
- Multiple mesa type

Applications

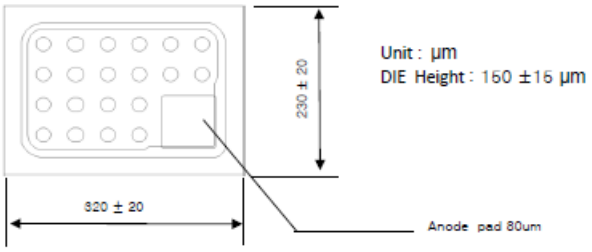
- Consumer electronics
- Safety sensor
- Illumination light source

Specifications

Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage Temperature	-40	85	°C	
Operating Temperature	-10	70	°C	
Continuous Forward Current		200	mA	

Electro-Optical Characteristics (T_a=25°C unless otherwise stated)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Threshold Current	I_{th}		30.0		mA	tp=1ms; Duty=10%
I_{th} Temperature Variation	ΔI_{th}		20.0		mA	T_a=-10 to 70°C
Slope Efficiency	η		0.9		W/A	I_f=150mA
Optical Output Power	P_o		110		mW	I_f=150mA
Optical Output Power	P_o		450		mW	I_f=500mA (tp=1us; Duty=5%)
Peak Wavelength	λ_P	930	940	950	nm	I_f=150mA
λ Temperature Variation	$\Delta\lambda/\Delta T$		0.06		nm/°C	T_a=-10 to 70°C at 150mA
Spectral Bandwidth (RMS)	$\Delta\lambda$			2.0	nm	I_f=150mA
Beam Divergence	Θ		23		°	P_o=110mW (FWHM)
Operating Voltage	V_f		1.9	2.5	V	I_f=150mA
Breakdown Voltage	V_b	-10			V	
Dynamic Resistance	R_d		3		Ohm	I_f=150mA

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.