



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



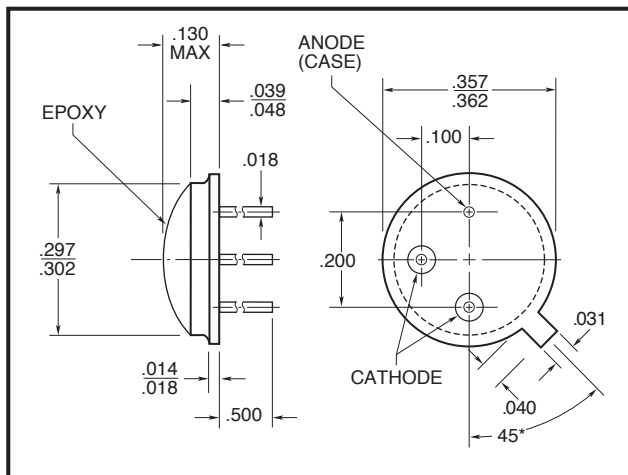
## Contact us

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**FEATURES**

- Ultra high power output
- Four wire bonds on die corners
- Very uniform optical beam
- Standard 3-lead TO-39 hermetic package
- Chip size .030 x .030 inches

All surfaces are gold plated. Dimensions are nominal values in inches unless otherwise specified. Two cathode pins **must be** externally connected together.



**ELECTRO-OPTICAL CHARACTERISTICS AT 25°C**

PARAMETERS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Total Power Output, P <sub>o</sub>	I <sub>F</sub> = 500mA I <sub>F</sub> = 10A	80	100 1300		mW
Radiant Intensity, I <sub>e</sub>	I <sub>F</sub> = 500mA		60		mW/sr
Peak Emission Wavelength, λ <sub>p</sub>			880		nm
Spectral Bandwidth at 50%, Δλ	I <sub>F</sub> = 50mA		80		nm
Half Intensity Beam Angle, θ			110		Deg
Forward Voltage, V <sub>F</sub>	I <sub>F</sub> = 500mA		1.65	2	Volts
Reverse Breakdown Voltage, V <sub>R</sub>	I <sub>R</sub> = 10μA	5	30		Volts
Capacitance, C	V <sub>R</sub> = 0V		90		pF
Rise Time			0.7		μsec
Fall Time			0.7		μsec

**ABSOLUTE MAXIMUM RATINGS AT 25°C CASE**

Power Dissipation <sup>1</sup>	1000 mW
Continuous Forward Current	500mA
Peak Forward Current (10μs, 400Hz) <sup>2</sup>	10A
Reverse Voltage	5V
Lead Soldering Temperature (1/16" from case for 10sec)	260°C

<sup>1</sup>Derate per Thermal Derating Curve above 25°C

<sup>2</sup>Derate linearly above 25°C

**THERMAL PARAMETERS**

Storage and Operating Temperature Range	-55°C to 100°C
Maximum Junction Temperature	100°C
Thermal Resistance, R <sub>THJA</sub> <sup>1</sup>	145°C/W Typical
Thermal Resistance, R <sub>THJA</sub> <sup>2</sup>	75°C/W Typical

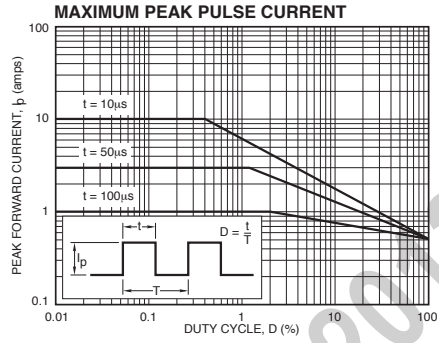
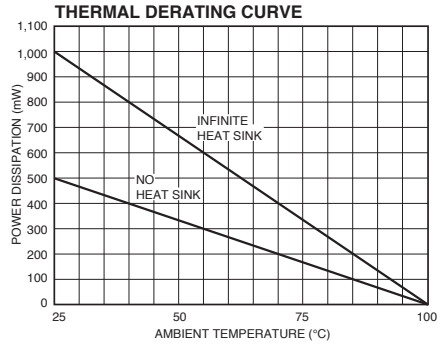
<sup>1</sup>Heat transfer minimized by measuring in still air with minimum heat conducting through leads

<sup>2</sup>Air circulating at a rapid rate to keep case temperature at 25°C

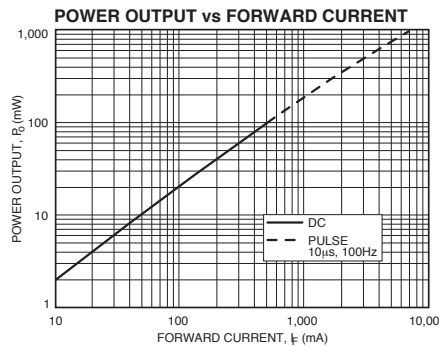
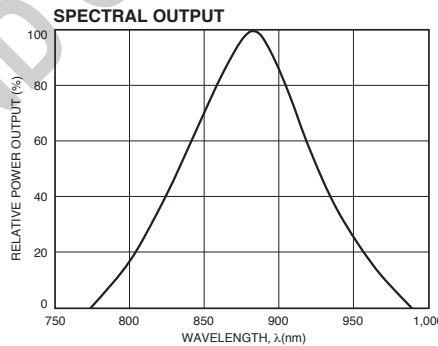
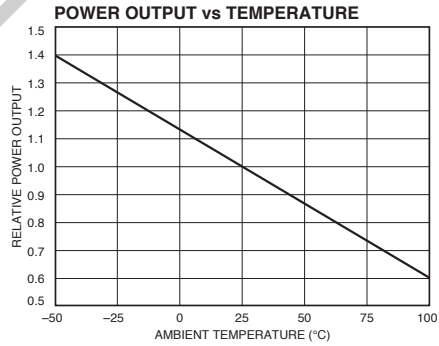
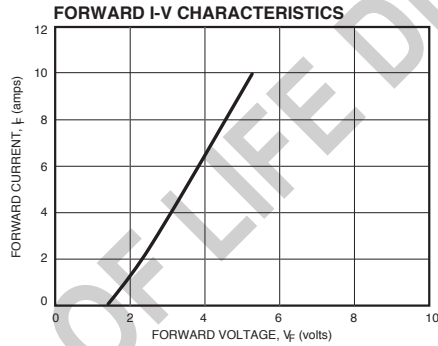
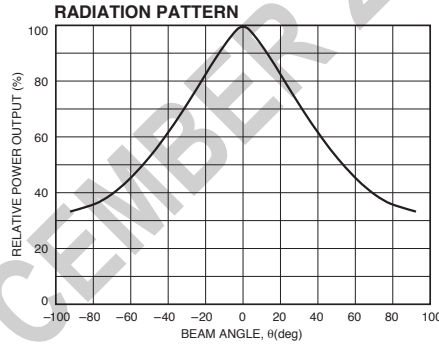
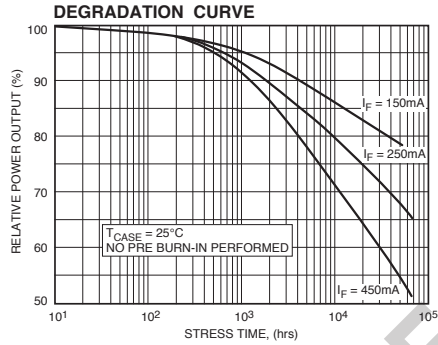


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MAXIMUM RATINGS



TYPICAL CHARACTERISTICS



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