

**FEATURES**

- Narrow Beam Angle
- Convenient TO-39 Package with Leads
- Hermetic Package

**Electro-Optical Characteristics at 25 °C**

Parameters	Test Conditions	Min	Typ	Max	Units
Total Power Output, P <sub>o</sub>	I <sub>F</sub> = 350 mA	80	170		mW
Peak Emission Wavelength, λ <sub>p</sub>	I <sub>F</sub> = 350 mA		635		nm
Spectral Bandwidth at 50 %, Δλ	I <sub>F</sub> = 350 mA		20		nm
Dominant Wavelength, λ <sub>d</sub>	I <sub>F</sub> = 350 mA		624		nm
Half Intensity Beam Angle, θ	I <sub>F</sub> = 350 mA		7		Deg
Forward Voltage, V <sub>F</sub>	I <sub>F</sub> = 350 mA		2.3	3.0	V
Reverse Breakdown Voltage, V <sub>R</sub>	I <sub>R</sub> = 5 μA	10			V

**Absolute Maximum Ratings at 25°C**

Parameters	Units
Continuous Forward Current	500 mA
Reverse Voltage	10 V
Lead Soldering Temperature (1/16" from case for 10 sec)	260°C

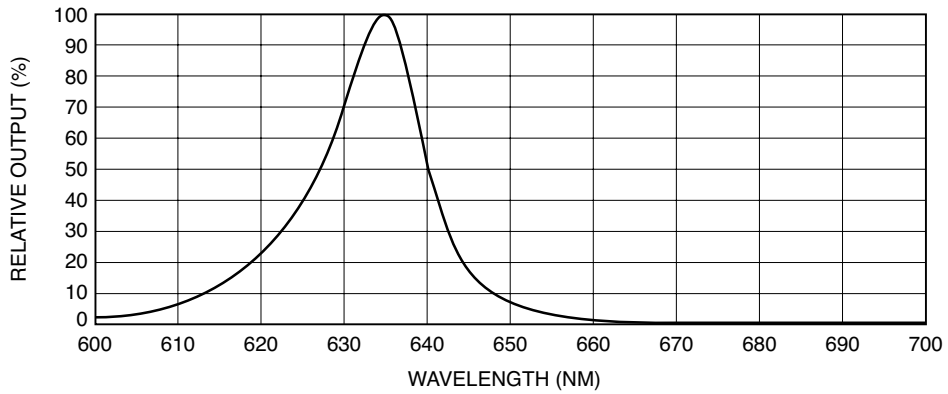
**Thermal Parameters**

Parameters	Units
Storage and Operating Temperature Range	-55°C to 100°C
Maximum Junction Temperature	115°C
Thermal Resistance, R <sub>THJA</sub> <sup>1</sup>	150°C/W Typical
Thermal Resistance, R <sub>THJA</sub> <sup>2</sup>	60°C/W Typical

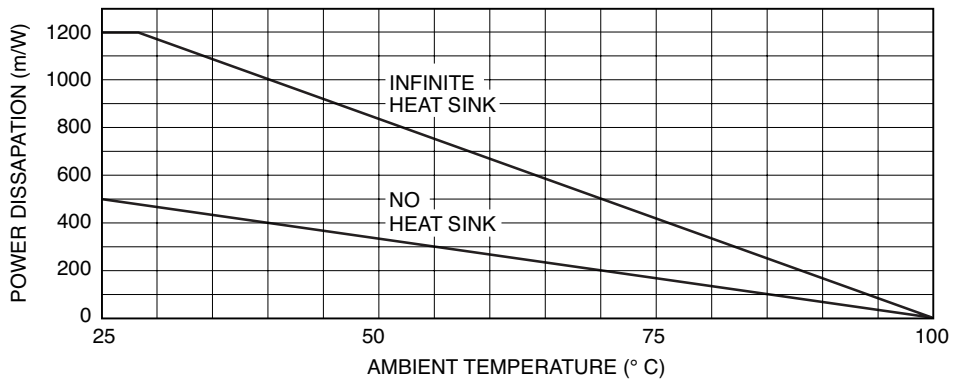
<sup>1</sup> Heat transfer minimized by measuring in still air with minimum heat conducting through leads.

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

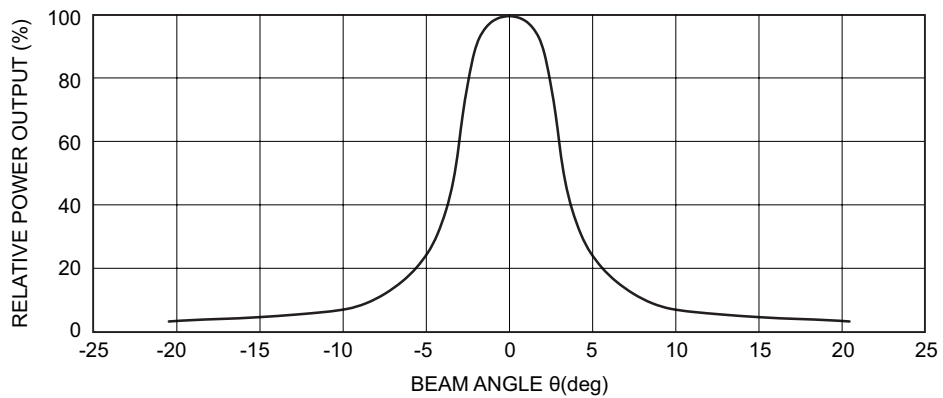
**Spectral Output**



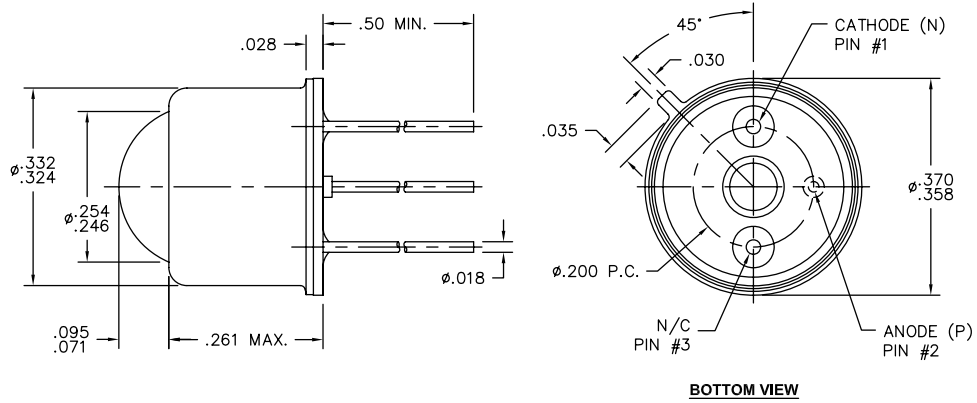
**Maximum Rated Thermal Derating Curve**



**Typical Radiation Pattern**



**Package Information**



Dimensions are nominal values in inches unless otherwise specified.

Specifications are subject to change without prior notice.