

**FEATURES**

- Extended operating temperature range
- No internal coatings
- No derating or heat sink required to 80°C
- Standard 2-lead TO-46 hermetic package

All surfaces are gold plated. Dimensions are nominal values in inches unless otherwise specified.

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

PARAMETERS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Total Power Output, P <sub>O</sub>	I <sub>F</sub> = 100mA	17	22		mW
Peak Emission Wavelength, λ <sub>P</sub>	I <sub>F</sub> = 20mA		850		nm
Spectral Bandwidth at 50%, Δλ	I <sub>F</sub> = 20mA		40		nm
Half Intensity Beam Angle, θ	I <sub>F</sub> = 20mA		8		Deg
Forward Voltage, V <sub>F</sub>	I <sub>F</sub> = 100mA		1.6	2	Volts
Reverse Breakdown Voltage, V <sub>R</sub>	I <sub>R</sub> = 10μA	5	30		Volts
Rise Time	I <sub>FP</sub> = 20mA		20		nsec
Fall Time	I <sub>FP</sub> = 20mA		20		nsec

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

Power Dissipation <sup>1</sup>	200mW
Continuous Forward Current	100mA
Peak Forward Current (10μs, 200Hz) <sup>2</sup>	300mA
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**

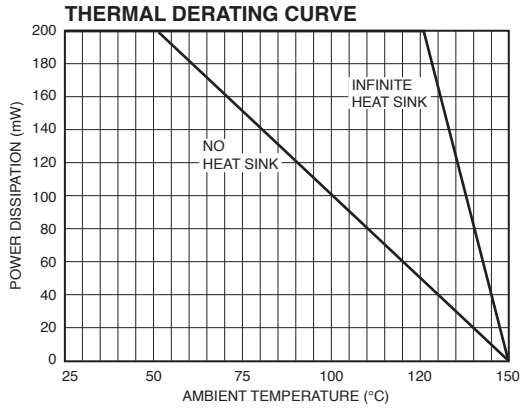
Storage and Operating Temperature Range	-65°C to 150°C
Maximum Junction Temperature	150°C
Thermal Resistance, R <sub>THJA</sub> <sup>1</sup>	400°C/W Typical
Thermal Resistance, R <sub>THJA</sub> <sup>2</sup>	135°C/W Typical

<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



MAXIMUM RATINGS



TYPICAL CHARACTERISTICS

