

**FEATURES**

- Highest power output available
- 880nm peak emission
- Nine chips connected in series
- Very wide angle of emission
- Electrically isolated case

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> = 300mA I <sub>F</sub> = 5A	390	500 6500		mW
Peak Emission Wavelength, λ <sub>p</sub>	I <sub>F</sub> = 50mA		880		nm
Spectral Bandwidth at 50%, Δλ			80		nm
Half Intensity Beam Angle, θ				120	
Forward Voltage, V <sub>F</sub>	I <sub>F</sub> = 300mA		13.5	15	Volts
Reverse Breakdown Voltage, V <sub>R</sub>	I <sub>R</sub> = 10μA	5	30		Volts
Capacitance, C	V <sub>R</sub> = 0V		11		pF
Rise Time			3		μsec
Fall Time			3		μsec

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

Power Dissipation <sup>1</sup>	6W
Continuous Forward Current	400mA
Peak Forward Current (10μs, 400Hz) <sup>2</sup>	5A
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>	60°C/W Typical
Thermal Resistance, R <sub>THJA</sub> <sup>2</sup>	16°C/W Typical

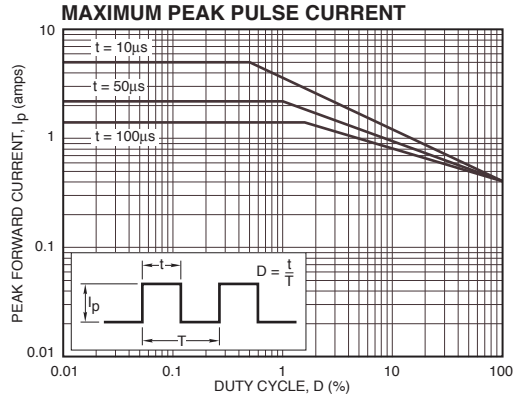
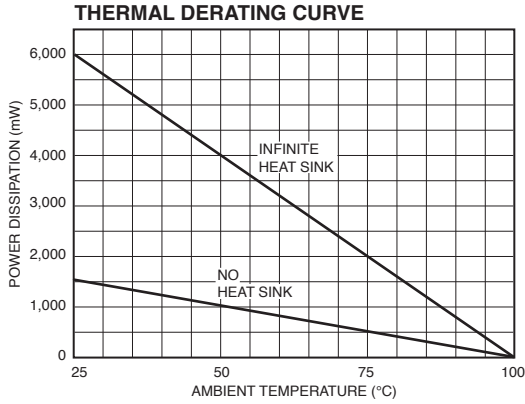
<sup>1</sup>Heat transfer minimized by measuring in still air with minimum heat conducting through leads

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



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MAXIMUM RATINGS



TYPICAL CHARACTERISTICS

