



**FEATURES**

- Ultra high optical output
- 850nm IR illuminator
- Very uniform optical beam
- Standard 2-lead TO-66 electrically isolated package
- Ideal for night vision illumination

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	300	425		mW
Peak Emission Wavelength, λ <sub>P</sub>	I <sub>F</sub> = 50mA		850		nm
Spectral Bandwidth at 50%, Δλ			40		nm
Half Intensity Beam Angle, θ			120		Deg
Forward Voltage, V <sub>F</sub>	I <sub>F</sub> = 300mA		4.8	5.4	Volts
Reverse Breakdown Voltage, V <sub>R</sub>	I <sub>R</sub> = 10μA	5	30		Volts
Rise Time			100		nsec
Fall Time			100		nsec

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

Power Dissipation <sup>1</sup>	2.2W
Continuous Forward Current	400mA
Peak Forward Current (10μs, 200Hz) <sup>2</sup>	1A
Reverse Voltage	5V
Lead Soldering Temperature (1/16" from case for 10 sec)	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	-40°C to +100°C
Maximum Junction Temperature	100°C
Thermal Resistance, R <sub>THJA</sub>	60°C/W Typical
Thermal Resistance, R <sub>THJC</sub>	16°C/W Typical



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