



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

ABSOLUTE MAXIMUM RATINGS AT 25°C CASE

Power Dissipation ¹	2.2W
Continuous Forward Current	400mA
Peak Forward Current (10μs, 200Hz) ²	1A
Reverse Voltage	5V
Lead Soldering Temperature (1/16" from case for 10 sec)	260°C

¹Derate per Thermal Derating Curve above 25°C

²Derate linearly above 25°C

THERMAL PARAMETERS

Storage and Operating Temperature Range	-40°C to +100°C
Maximum Junction Temperature	100°C
Thermal Resistance, R _{THJA}	60°C/W Typical
Thermal Resistance, R _{THJC}	16°C/W Typical



