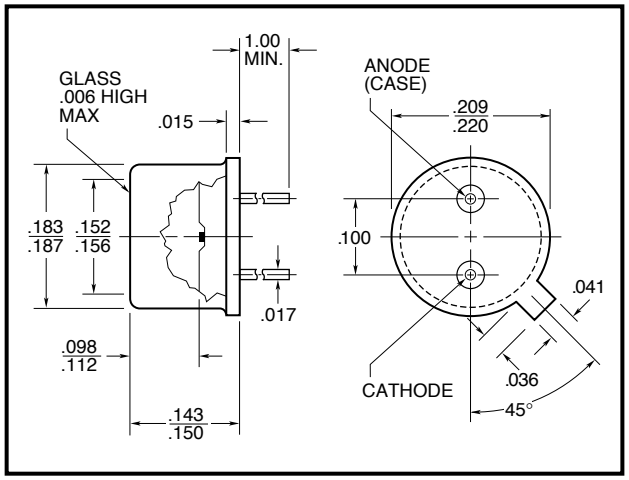

FEATURES

- Designed for high radiation tolerance
- Excellent power degradation characteristics
- High power output
- Fast response
- Hermetically sealed metal package
- MIL-S-19500 screening available
- No internal coatings

All surfaces are gold plated. Dimensions are nominal values in inches unless otherwise specified. Window caps are welded to the case.

ELECTRO-OPTICAL CHARACTERISTICS AT 25°C

PARAMETERS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Total Power Output, P_o	I_F = 100mA	2	3		mW
Peak Emission Wavelength, λ_P	I_F = 50mA		810		nm
Spectral Bandwidth at 50%, $\Delta\lambda$			50		nm
Half Intensity Beam Angle, θ			80		Deg
Forward Voltage, V_F	I_F = 100mA		1.45	1.8	Volts
Reverse Breakdown Voltage, V_R	I_R = 10µA	3	4		Volts
Capacitance, C	V_R = 0V		150		pF
Rise Time			60		nsec
Fall Time			60		nsec

ABSOLUTE MAXIMUM RATINGS AT 25°C CASE

Power Dissipation[1]	180mW
Continuous Forward Current	100mA
Peak Forward Current (10µs, 150Hz)[2]	3A
Reverse Voltage	3V
Lead Soldering Temperature (1/16" from case for 10sec)	240°C

[1]Derate per Thermal Derating Curve above 25°C
[2]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_{THJA}[1]	400°C/W Typical
Thermal Resistance, R_{THJA}[2]	135°C/W Typical

[1]Heat transfer minimized by measuring in still air with minimum heat conducting through leads
[2]Air circulating at a rapid rate to keep case temperature at 25°C

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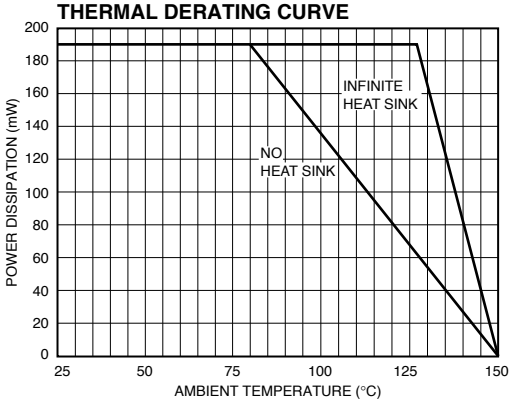
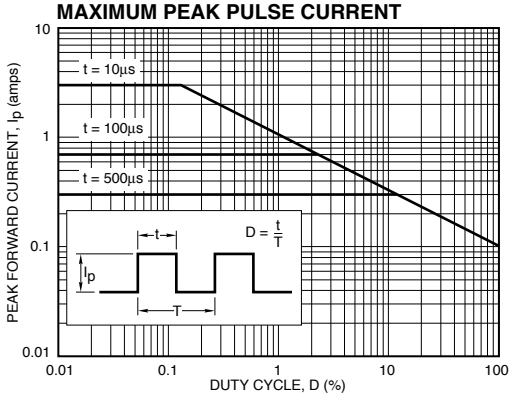
MAXIMUM RATINGS

THERMAL DERATING CURVE

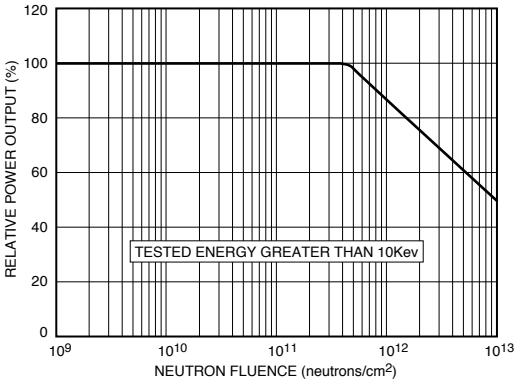


MAXIMUM PEAK PULSE CURRENT

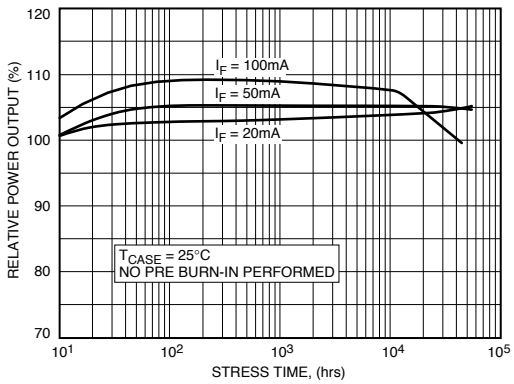


TYPICAL CHARACTERISTICS

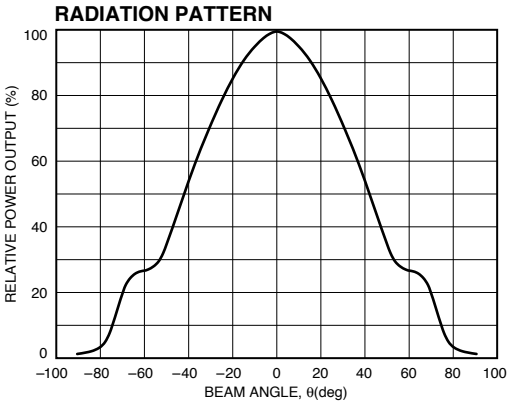
POWER OUTPUT vs NEUTRON IRRADIATION



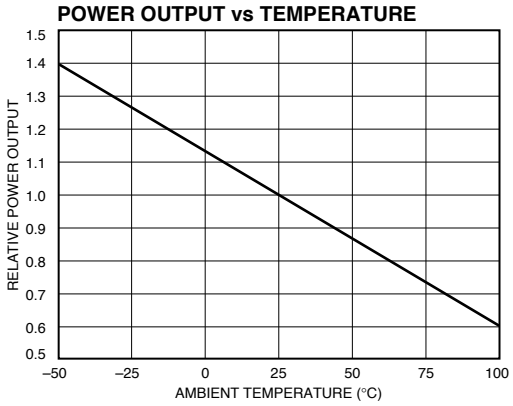
DEGRADATION CURVE



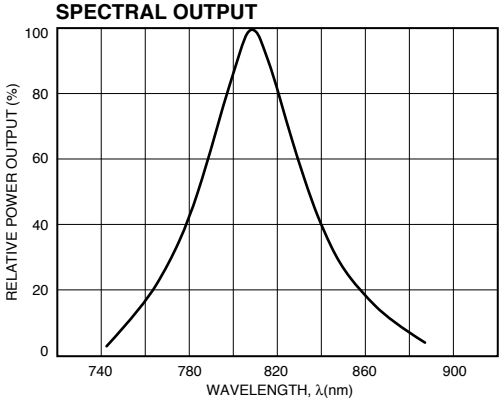
RADIATION PATTERN



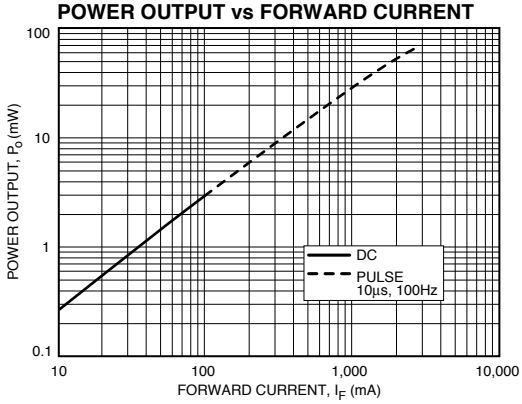
POWER OUTPUT vs TEMPERATURE



SPECTRAL OUTPUT



POWER OUTPUT vs FORWARD CURRENT



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