

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	$I_F = 100\text{mA}$	1.5	3		mW
Peak Emission Wavelength, λ_p	$I_F = 50\text{mA}$		810		nm
Spectral Bandwidth at 50%, $\Delta\lambda$			50		nm
Half Intensity Beam Angle, θ				8	
Forward Voltage, V_F	$I_F = 100\text{mA}$		1.45	1.8	Volts
Reverse Breakdown Voltage, V_R	$I_R = 10\mu\text{A}$	3	4		Volts
Capacitance, C	$V_R = 0\text{V}$		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 (10 μs , 150Hz) ²	3A
Reverse Voltage	3V
Lead Soldering Temperature (1/16" from case for 10sec)	240°C

¹Derate per Thermal Derating Curve above 25°C

²Derate linearly above 25°C

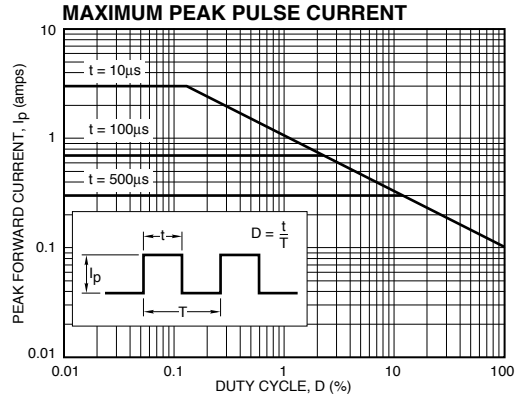
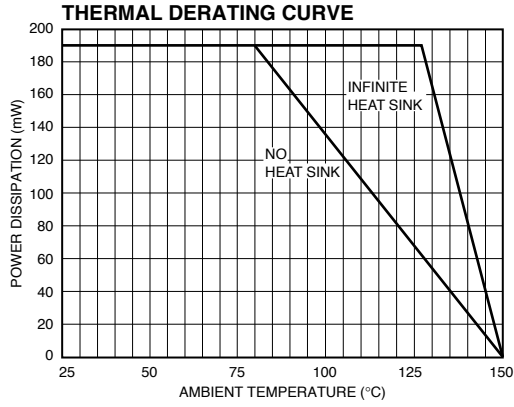
THERMAL PARAMETERS

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

¹Heat transfer minimized by measuring in still air with minimum heat conducting through leads

²Air circulating at a rapid rate to keep case temperature at 25°C

MAXIMUM RATINGS



TYPICAL CHARACTERISTICS

