

FEATURES

- High reliability LPE GaAlAs IRLEDs
- High power output
- 880nm peak emission
- Four wire bonds on chip corners
- Hermetically sealed stud 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	$I_F = 300\text{mA}$	20	25		mW
Peak Emission Wavelength, λ_p	$I_F = 50\text{mA}$		880		nm
Spectral Bandwidth at 50%, $\Delta\lambda$			80		nm
Half Intensity Beam Angle, θ				115	
Forward Voltage, V_F	$I_F = 300\text{mA}$		1.5	1.8	Volts
Reverse Breakdown Voltage, V_R	$I_R = 10\mu\text{A}$	5	40		Volts
Capacitance, C	$V_R = 0\text{V}$		90		pF
Rise Time			0.7		μsec
Fall Time			0.7		μsec

ABSOLUTE MAXIMUM RATINGS AT 25°C CASE

Power Dissipation ¹	900mW
Continuous Forward Current	450mA
Peak Forward Current (10 μs , 700Hz) ²	12A
Reverse Voltage	5V
Lead Soldering Temperature (1/16" from case for 10sec)	260°C

¹Derate per Thermal Derating Curve above 25°C

²Derate linearly above 25°C

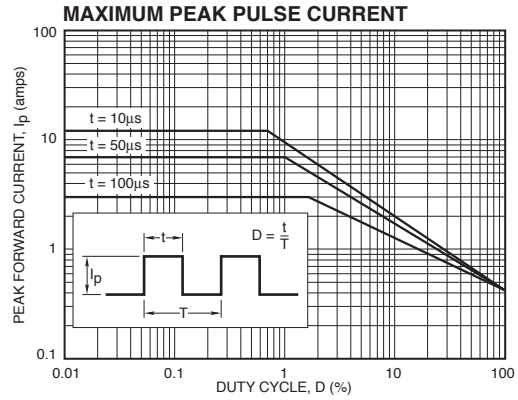
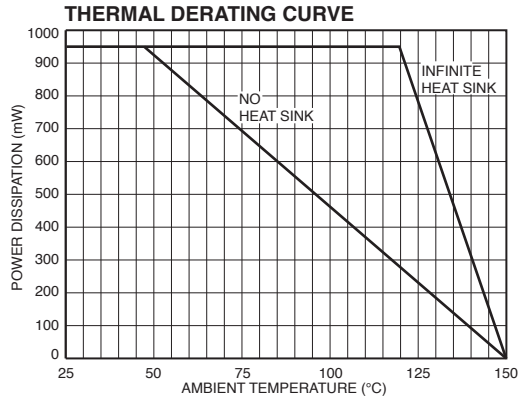
THERMAL PARAMETERS

Storage and Operating Temperature Range	-65C TO 150°C
Maximum Junction Temperature	150°C
Thermal Resistance, R_{THJA} ¹	120°C/W Typical
Thermal Resistance, R_{THJA} ²	35°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

