

## FEATURES

- High reliability LPE grown GaAlAs
- High power output
- Fast response
- Wide range of linear power output
- Custom packages available
- Custom spectral emission from 780-870nm available

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, $P_o$	$I_F = 100\text{mA}$	3.5	4.5		mW
Peak Emission Wavelength, $\lambda_p$	$I_F = 50\text{mA}$		870		nm
Spectral Bandwidth at 50%, $\Delta\lambda$			50		nm
Half Intensity Beam Angle, $\theta$				8	
Forward Voltage, $V_F$	$I_F = 100\text{mA}$		1.5	1.8	Volts
Reverse Breakdown Voltage, $V_R$	$I_R = 10\mu\text{A}$	2	5		Volts
Capacitance, C	$V_R = 0\text{V}$		150		pF
Rise Time			15		nsec
Fall Time			15		nsec

## ABSOLUTE MAXIMUM RATINGS AT 25°C CASE

Power Dissipation <sup>1</sup>	180mW
Continuous Forward Current	100mA
Peak Forward Current (10 $\mu\text{s}$ , 200Hz) <sup>2</sup>	3A
Reverse Voltage	2V
Lead Soldering Temperature (1/16" from case for 10sec)	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	-55°C TO 100°C
Maximum Junction Temperature	100°C
Thermal Resistance, $R_{THJA}$ <sup>1</sup>	400°C/W Typical
Thermal Resistance, $R_{THJA}$ <sup>2</sup>	135°C/W Typical

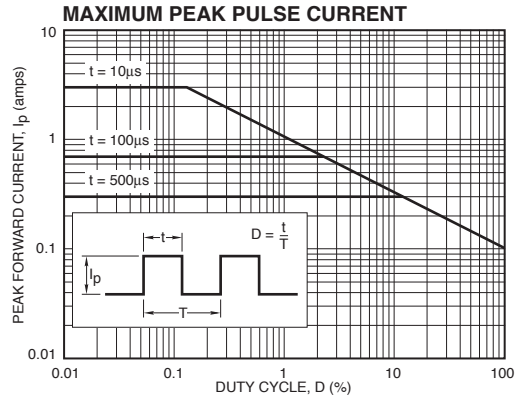
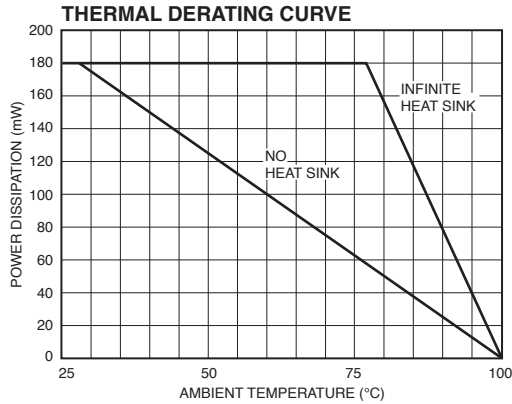
<sup>1</sup>Heat transfer minimized by measuring in still air with minimum heat conducting through leads

<sup>2</sup>Air circulating at a rapid rate to keep case temperature at 25°C



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MAXIMUM RATINGS



TYPICAL CHARACTERISTICS

