

FEATURES

- High optical output
- 850nm peak emission
- Hermetically sealed TO-46 package
- Medium emission angle for best coverage/power density

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

ELECTRO-OPTICAL CHARACTERISTICS AT 25°C

PARAMETERS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Total Power Output, P_o	$I_F = 100\text{mA}$	25	35		mW
Peak Emission Wavelength, λ_p	$I_F = 20\text{mA}$		850		nm
Spectral Bandwidth at 50%, $\Delta\lambda$	$I_F = 20\text{mA}$		40		nm
Half Intensity Beam Angle, θ	$I_F = 20\text{mA}$		35		Deg
Forward Voltage, V_F	$I_F = 100\text{mA}$		1.6	2	Volts
Reverse Breakdown Voltage, V_R	$I_R = 10\mu\text{A}$	5	30		Volts
Rise Time	$I_{FP} = 50\text{mA}$		20		nsec
Fall Time	$I_{FP} = 50\text{mA}$		20		nsec

ABSOLUTE MAXIMUM RATINGS AT 25°C CASE

Power Dissipation	200mW
Continuous Forward Current	100mA
Peak Forward Current (10 μs , 200Hz) ¹	300mA
Reverse Voltage	5V
Lead Soldering Temperature (1/16" from case for 10sec)	260°C

¹Derate per Thermal Derating Curve above 25°C

THERMAL PARAMETERS

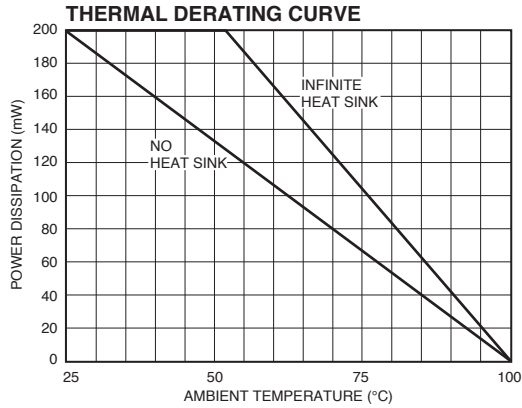
Storage and Operating Temperature Range	-40°C to 100°C
Maximum Junction Temperature	100°C
Thermal Resistance, R_{THJA} ¹	400°C/W Typical
Thermal Resistance, R_{THJA} ²	135°C/W Typical

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

