

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 = 100mA | 25 | 35 | | mW |
| Peak Emission Wavelength, λ _p | I _F = 20mA | | 850 | | nm |
| Spectral Bandwidth at 50%, Δλ | I _F = 20mA | | 40 | | nm |
| Half Intensity Beam Angle, θ | I _F = 20mA | | 35 | | Deg |
| Forward Voltage, V _F | I _F = 100mA | | 1.6 | 2 | Volts |
| Reverse Breakdown Voltage, V _R | I _R = 10μA | 5 | 30 | | Volts |
| Rise Time | I _{FP} = 50mA | | 20 | | nsec |
| Fall Time | I _{FP} = 50mA | | 20 | | nsec |

ABSOLUTE MAXIMUM RATINGS AT 25°C CASE

| | |
|--|-------|
| Power Dissipation | 200mW |
| Continuous Forward Current | 100mA |
| Peak Forward Current (10μs, 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 |

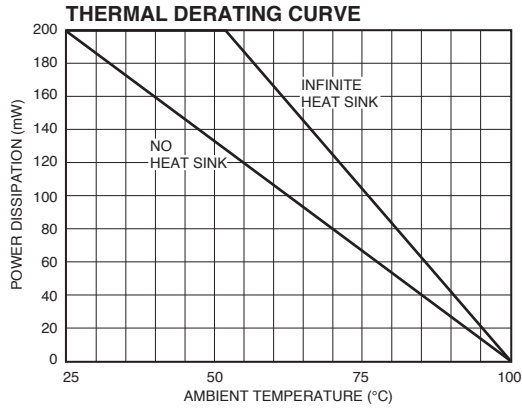
¹Heat transfer minimized by measuring in still air with minimum heat conducting through leads

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



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MAXIMUM RATINGS



TYPICAL CHARACTERISTICS

