

FEATURES

- Extended operating temperature range
- No internal coatings
- No derating or heat sink required to 80°C

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 | $I_F = 100\text{mA}$ | 6 | 8.5 | | 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 | | | | 35 | |
| Forward Voltage, V_F | $I_F = 100\text{mA}$ | | 1.55 | 1.9 | Volts |
| Reverse Breakdown Voltage, V_R | $I_R = 10\mu\text{A}$ | 5 | 30 | | Volts |
| Capacitance, C | $V_R = 0\text{V}$ | | 17 | | pF |
| Rise Time | | | 0.5 | | μsec |
| Fall Time | | | 0.5 | | μsec |

ABSOLUTE MAXIMUM RATINGS AT 25°C CASE

| | |
|--|-------|
| Power Dissipation ¹ | 190mW |
| Continuous Forward Current | 100mA |
| Peak Forward Current (10 μs , 400Hz) ² | 3A |
| 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 | -65°C TO 150°C |
| Maximum Junction Temperature | 150°C |
| Thermal Resistance, R_{THJA} ¹ | 370°C/W Typical |
| Thermal Resistance, R_{THJA} ² | 120°C/W Typical |

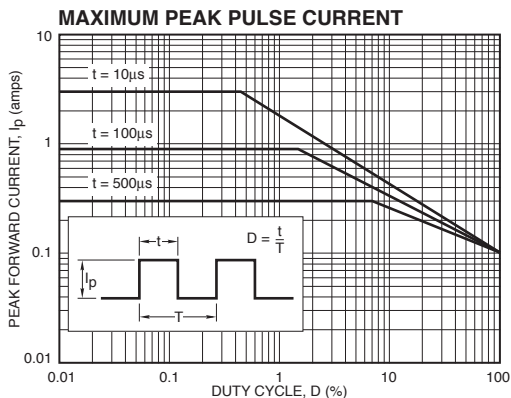
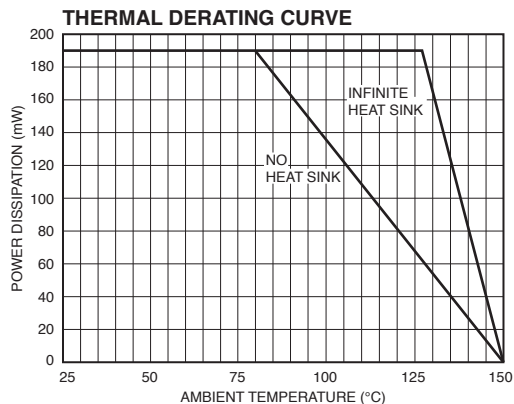
¹Heat transfer minimized by measuring in still air with minimum heat conducting through leads

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

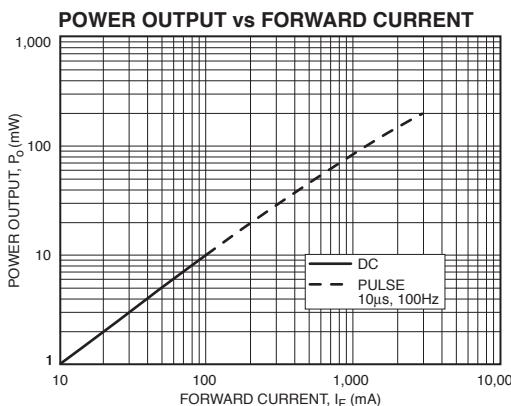
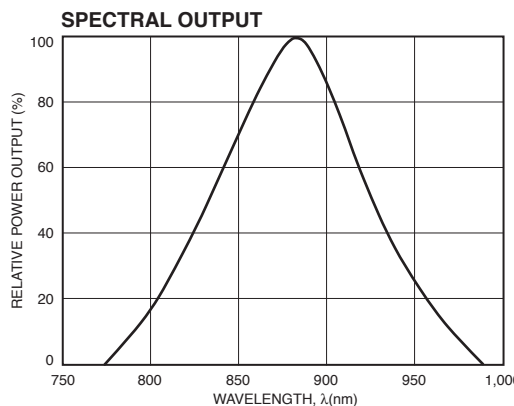
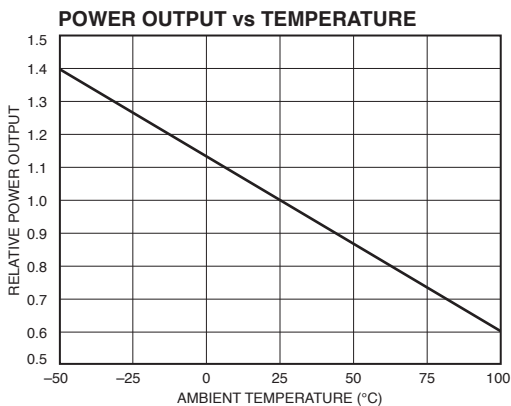
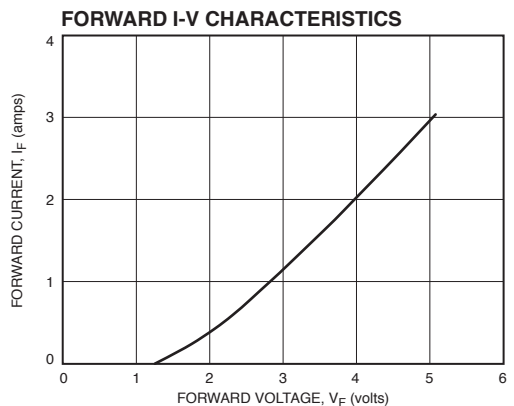
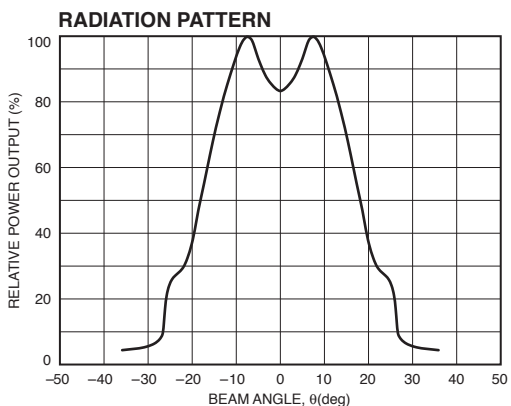
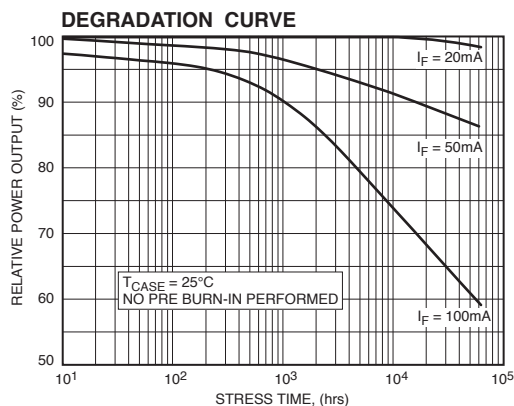


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MAXIMUM RATINGS



TYPICAL CHARACTERISTICS



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