

FEATURES

- Extended operating temperature range
- No internal coatings
- No derating or heat sink required to 80°C
- Standard 2-lead TO-46 hermetic package

All surfaces are gold plated. Dimensions are nominal values in inches unless otherwise specified.

ELECTRO-OPTICAL CHARACTERISTICS AT 25°C

PARAMETERS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Total Power Output, P _o	I _F = 100mA	18	25		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} = 20mA		20		nsec
Fall Time	I _{FP} = 20mA		20		nsec

ABSOLUTE MAXIMUM RATINGS AT 25°C CASE

Power Dissipation ¹	200mW
Continuous Forward Current	100mA
Peak Forward Current (10μs, 200Hz) ²	300mA
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

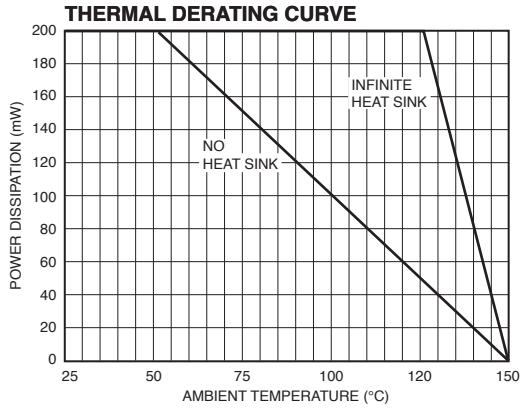
Storage and Operating Temperature Range	-65°C to 150°C
Maximum Junction Temperature	150°C
Thermal Resistance, R _{THJA} ¹	400°C/W Typical
Thermal Resistance, R _{THJA} ²	135°C/W Typical

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

