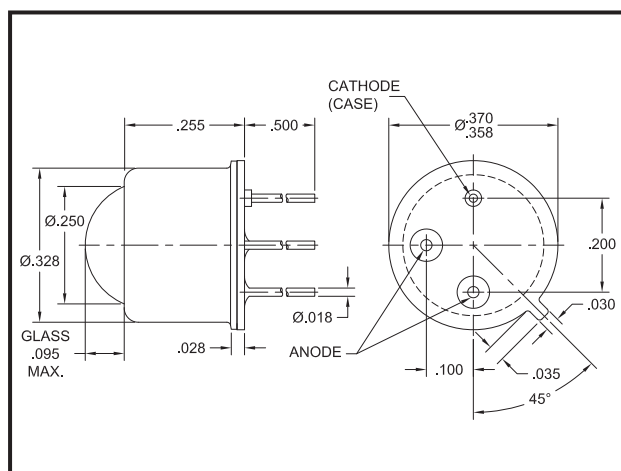




FEATURES

- Ultra high optical output
- Four wire bonds on die corners
- Very narrow optical beam
- Standard 3-lead TO-39 hermetic package
- Chip size: 0.026 x 0.026

All surfaces are gold plated. Dimensions are nominal values in inches unless otherwise specified. Two Anode pins **must be** externally connected together.



ELECTRO-OPTICAL CHARACTERISTICS AT 25°C

PARAMETERS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Total Power Output, P_O	$I_F = 500\text{mA}$	55	110		mW
Peak Emission Wavelength, λ_P	$I_F = 50\text{mA}$		850		nm
Spectral Bandwidth at 50%, $\Delta\lambda$	$I_F = 50\text{mA}$		40		nm
Half Intensity Beam Angle, θ	$I_F = 50\text{mA}$		7		Deg
Forward Voltage, V_F	$I_F = 500\text{mA}$		1.7	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 ¹	1000mW
Continuous Forward Current	500mA
Peak Forward Current (10 μs , 200Hz) ²	1.5A
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	-40°C to 100°C
Maximum Junction Temperature	100°C
Thermal Resistance, R_{THJA} ¹	150°C/W Typical
Thermal Resistance, R_{THJA} ²	60°C/W Typical

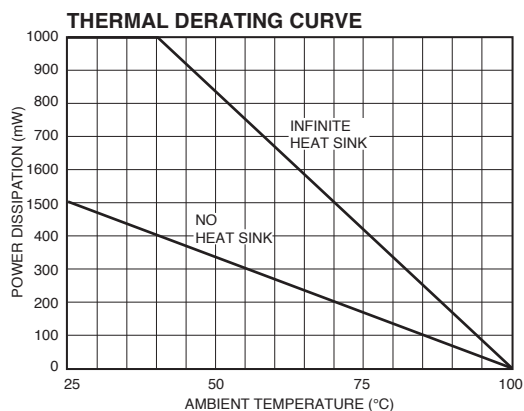
¹Heat transfer minimized by measuring in still air with minimum heat conducting through leads

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

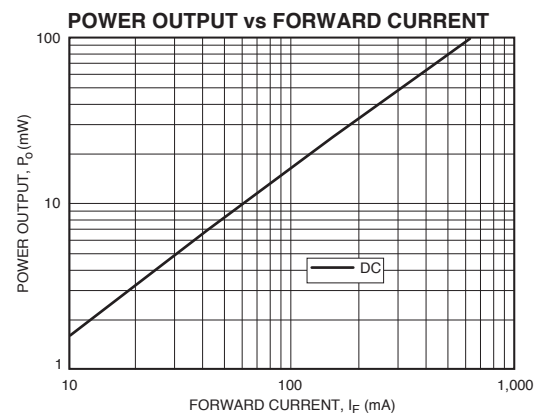
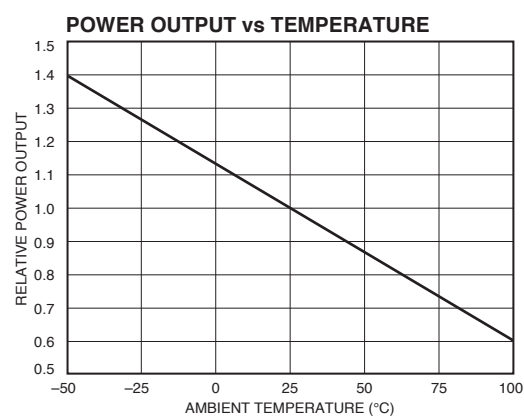
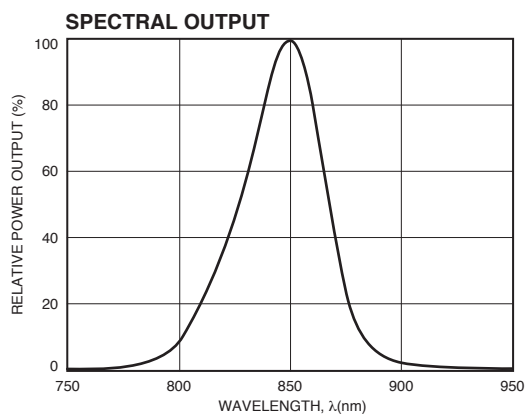
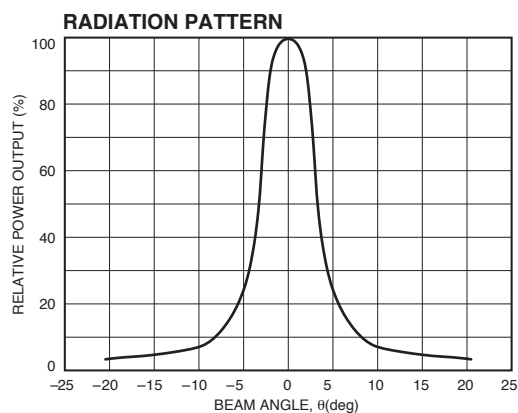
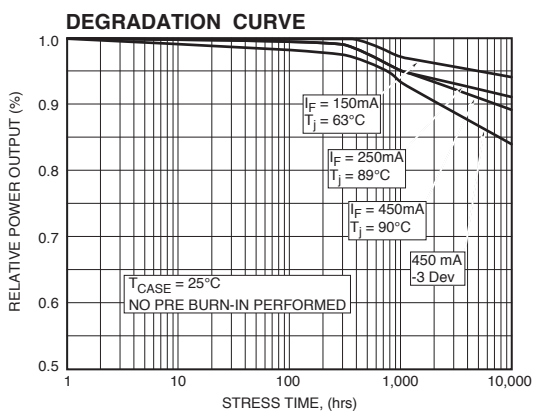


750 Mitchell Road, Newbury Park, California 91320
 Phone: (805) 499-0335, Fax: (805) 499-8108
 Email: sales@optodiode.com, Website: www.optodiode.com

MAXIMUM RATINGS



TYPICAL CHARACTERISTICS



OPTO DIODE CORP.

750 Mitchell Road, Newbury Park, California 91320

Phone: (805) 499-0335, Fax: (805) 499-8108

Email: sales@optodiode.com, Website: www.optodiode.com