# mail

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

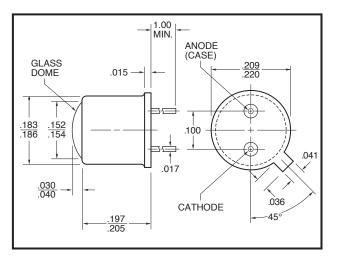


## Contact us

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### HIGH TEMPERATURE GaAIAs IR EMITTERS



#### **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 | ТҮР  | MAX | UNITS |
|--|------------------------|-----|------|-----|-------|
| Total Power Output, Po                           | I <sub>F</sub> = 100mA | 6   | 8    |     | mW    |
| Peak Emission Wavelength, $\lambda_P$            |                        |     | 880  |     | nm    |
| Spectral Bandwidth at 50%, $\Delta\lambda$       | I <sub>F</sub> = 50mA  |     | 80   |     | nm    |
| Half Intensity Beam Angle, $\boldsymbol{\theta}$ |                        |     | 8    |     | Deg   |
| Forward Voltage, V <sub>F</sub>                  | I <sub>F</sub> = 100mA |     | 1.55 | 1.9 | Volts |
| Reverse Breakdown Voltage, V <sub>R</sub>        | I <sub>R</sub> = 10μA  | 5   | 30   |     | Volts |
| Capacitance, C                                   | $V_{R} = 0V$           |     | 17   |     | pF    |
| Rise Time  |                        |     | 0.5  |     | μsec  |
| Fall Time  |                        |     | 0.5  |     | μsec  |

#### ABSOLUTE MAXIMUM RATINGS AT 25°C CASE

| Power Dissipation <sup>1</sup>                         | 190mW |
|--|-------|
| Continuous Forward Current                             | 100mA |
| Peak Forward Current (10µs, 400Hz) <sup>2</sup>        | 3A    |
| Reverse Voltage  | 5V    |
| Lead Soldering Temperature (1/16" from case for 10sec) | 260°C |

<sup>1</sup>Derate per Thermal Derating Curve above 25°C <sup>2</sup>Derate linearly above 25°C

#### **THERMAL PARAMETERS**

| Storage and Operating Temperature Range            | -65°C TO 150°C  |
|--|-----------------|
| Maximum Junction Temperature                       | 150°C           |
| Thermal Resistance, R <sub>THJA</sub> 1            | 370°C/W Typical |
| Thermal Resistance, R <sub>THJA</sub> <sup>2</sup> | 120°C/W Typical |

<sup>1</sup>Heat transfer minimized by measuring in still air with minimum heat conducting through leads <sup>2</sup>Air circulating at a rapid rate to keep case temperature at 25°C

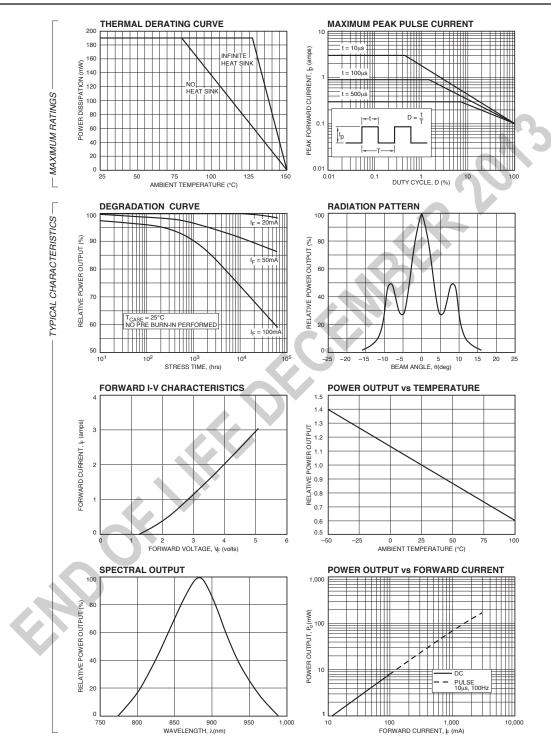


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#### OD-880FHT





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