

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!

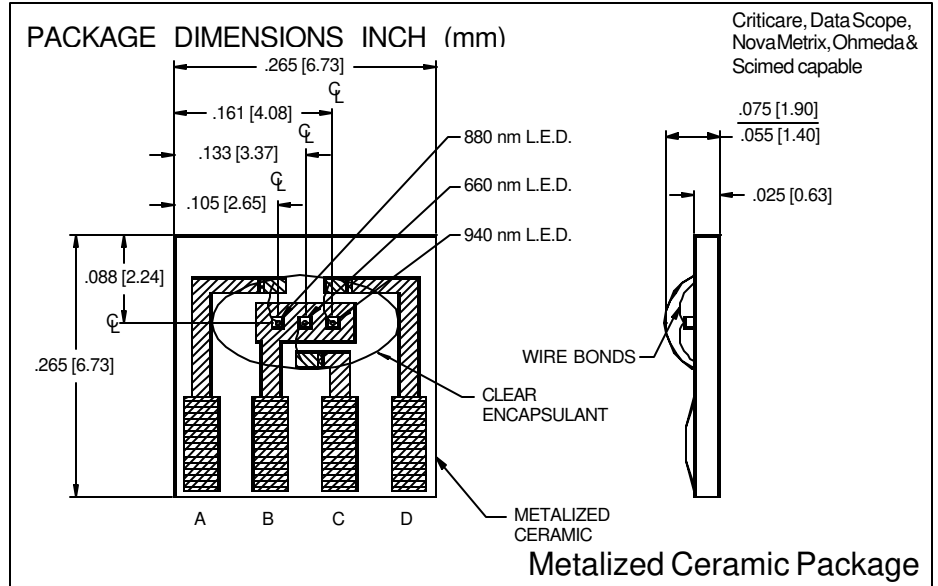
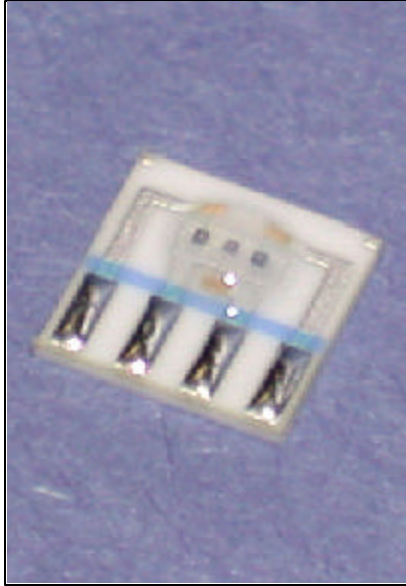


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FEATURES

- Low cost
- 660 nm +/- 3 nm
- 4 drive line

DESCRIPTION:

The **PDI-E839** is a four drive line three emitter oximeter component. The 880, 660 GaAlAs and 940 nm GaAs emitters are high power LPE grown. The metalized ceramic has clear epoxy encapsulation with top side solder pads. These components are ideal for O.E.M. and repair replacements of oximeter probe assemblies.

APPLICATIONS

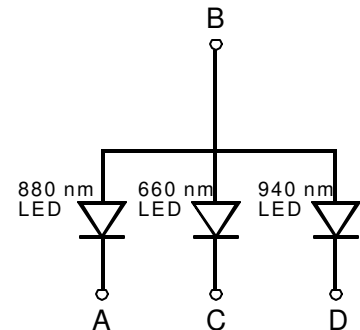
- Oximeter probes
- Finger clamps
- Reusable probes

ABSOLUTE MAXIMUM RATING (TA=25°C unless otherwise noted)

| SYMBOL | PARAMETER | MIN | MAX | UNITS |
|---------------------------------|---|-----|-----|-------|
| P _d | Power Dissipation I _F =20 mA | | 250 | mW |
| I _{FP} | Continuous Forward Current | | 30 | mA |
| I _{FP} | Peak Forward Current | | 200 | mA |
| V _R | Reverse Voltage | | 4 | V |
| T _o & T _s | Storage & Operating Temp | -40 | +80 | °C |
| TS | Soldering Temperature* | | 240 | °C |

*For 3 seconds max using a heat sink.

SCHEMATIC



ELECTRO-OPTICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

| SYMBOL | CHARACTERISTIC | TEST COND | 880 nm | | | 660 nm | | | 940 nm | | | UNITS |
|----------------|----------------------|------------------------|--------|-----|-----|--------|-----|-----|--------|-----|-----|-------|
| | | | MIN | TYP | MAX | MIN | TYP | MAX | MIN | TYP | MAX | |
| P _o | Radiant Flux** | I _F = 20 mA | 1.8 | 2.0 | | 1.8 | 2.4 | | 1.2 | 1.8 | | mW |
| I _v | Luminous Intensity** | I _F = 20 mA | | | | 20 | 30 | | | | | mcd |
| V _F | Forward Voltage | I _F = 20 mA | | 1.5 | 1.7 | | 1.8 | 2.4 | | 1.3 | 1.5 | V |
| V _R | Reverse breakdown | I _F = 10 μA | 5 | | | 5 | | | 5 | | | V |
| λ _p | Peak Wavelength | I _F = 20 mA | 870 | 880 | 890 | 658 | 661 | 664 | 930 | 904 | 950 | nm |
| Δλ | Spectral Bandwidth | I _F = 20 mA | | 50 | | | 25 | | | 50 | | nm |
| T _r | Rise Time | I _F = 20 mA | | 0.8 | | | 0.8 | | | 0.8 | | μS |
| T _r | Fall Time | I _F = 20 mA | | 0.8 | | | 0.8 | | | 0.8 | | μS |

**Bare chip measured packaged in a flat TO-18/TO-46 header without resin coating.