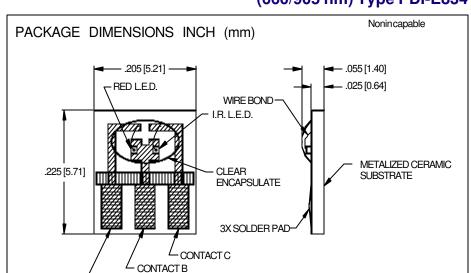
PHOTONIC DETECTORS INC.

Three Drive Emitter, Oximeter Component (660/905 nm) Type PDI-E834



FEATURES

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

DESCRIPTION: The **PDI-E834** is a three drive line dual emitter oximeter component. The 660 and 905 nm GaAlAs 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.

CONTACT A

APPLICATIONS

Metalized Ceramic Package

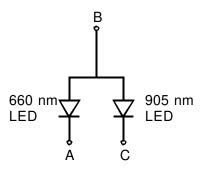
- Oximeter probes
- Finger clamps
- Reusable probes

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

| SYMBOL | PARAMETER | MIN | MAX | UNITS | |
|--------------------------------|---|-----|-----|-------|--|
| Pd | Power Dissipation I _F =20 mA | | 250 | mW | |
| I _{FP} | Continuous Forward Current | | 30 | mA | |
| I FP | Peak Forward Current | | 200 | mA | |
| VR | Reverse Voltage | | 4 | V | |
| T _o &T _s | Storage & Operating Temp | -40 | +80 | ۰C | |
| TS | Soldering Temperature* | | 240 | °C | |

^{*}For3 seconds max using a heat sink.

SCHEMATIC



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

| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | 660 nm | | 905 nm | | | LINITO | |
|----------------|----------------------|--------------------------|--------|-----|--------|-----|-----|--------|-------|
| | | | MIN | TYP | MAX | MIN | TYP | MAX | UNITS |
| Po | Radiant Flux** | I _F = 20 mA | 1.8 | 2.4 | | 1.2 | 1.8 | | mW |
| Ιv | Luminous Intensity** | I _F = 20 mA | 20 | 30 | | | | | mcd |
| VF | Forward Voltage | I _F = 20 mA | | 1.8 | 2.4 | | 1.2 | 1.5 | V |
| V_{R} | Reverse breakdown | I _F = 10 // A | 5 | | | 5 | | | V |
| λp | Peak Wavelength | I _F = 20 mA | 658 | 661 | 664 | 895 | 905 | 915 | nm |
| Δλ | Spectral Bandwidth | I _F = 20 mA | | 25 | | | 50 | | nm |
| T _r | Rise Time | I _F = 20 mA | | 0.8 | | | 0.8 | | μS |
| Tr | Fall Time | I _F = 20 mA | | 0.8 | | | 0.8 | | μS |

^{**} Bare chip measured packaged in a flat TO-18/TO-46 header without resin coating or cap.