

**FEATURES**

- Small footprint
- Blue enhanced
- Photoconductive mode
- High speed

**DESCRIPTION**

The PDB-C144 is a blue enhanced PIN silicon photodiode packaged with a lens in a water clear micro plastic package.

**APPLICATIONS**

- Instrumentation
- Small electronics

**ABSOLUTE MAXIMUM RATING**

T<sub>A</sub> = 23°C UNLESS OTHERWISE NOTED

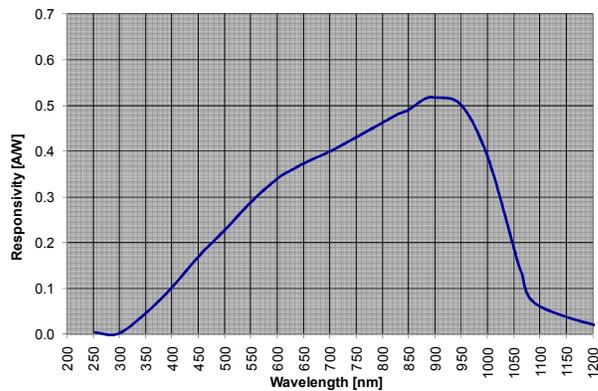
| SYMBOL           | PARAMETER              | MIN | MAX  | UNITS |
|------------------|------------------------|-----|------|-------|
| V <sub>R</sub>   | Reverse Voltage        |     | 50   | V     |
| T <sub>Op</sub>  | Operating Temperature  | -40 | +105 | °C    |
| T <sub>Stg</sub> | Storage Temperature    | -55 | +125 | °C    |
| T <sub>S</sub>   | Soldering Temperature* |     | +260 | °C    |

\* 1/16 inch from case for 3 seconds max.

**RELIABILITY**

Contact API for recommendations on specific test conditions and procedures.

**TYPICAL SPECTRAL RESPONSE**



T<sub>A</sub> = 23°C, UNLESS OTHERWISE NOTED

**ELECTRO-OPTICAL CHARACTERISTICS RATING**

| SYMBOL             | CHARACTERISTIC    | TEST CONDITIONS                          | MIN | TYP | MAX  | UNITS |
|--------------------|-------------------|--|-----|-----|------|-------|
| V <sub>br</sub>    | Breakdown Voltage | I <sub>R</sub> = 10 μA                   | 35  | -   | -    | V     |
| V <sub>f</sub>     | Forward Voltage   | I <sub>R</sub> = 10 mA                   | 0.5 | -   | 1.3  | V     |
| I <sub>d</sub>     | Dark Current      | V <sub>R</sub> = 2.5 V                   | -   | -   | 10.0 | nA    |
| I <sub>L</sub>     | Light Current     | V <sub>R</sub> = 5.0 V, 2856 K, 1000 lux | -   | 8.0 | -    | μA    |
| C                  | Capacitance       | V <sub>R</sub> = 3 V, H = 0              | -   | 3.0 | -    | pF    |
| R                  | Responsivity      | λ = 900 nm                               | -   | 0.5 | -    | A/W   |
| λ <sub>range</sub> | Spectral Range    | Spot Scan                                | 400 | -   | 1100 | nm    |

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