## 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!



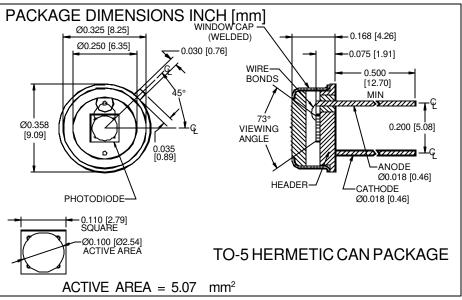
### Contact us

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# PHOTONIC Silicon Photodiode, U.V. Enhanced Photoconductive DETECTORS INC. Type PDU-C115





#### FEATURES

- High speed
- U.V. enhanced
- Low capacitance
- U.V. window

#### DESCRIPTION

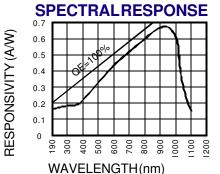
The **PDU-C115** is a silicon, PIN planar diffused, U.V. enhanced photodiode. Ideal for high speed photoconductive applications. Packaged in a hermetic TO-5 metal can with a U.V. transmitting window.

#### **APPLICATIONS**

- Spetrometers
- Fluorescent analysers
- U.V. meters
- Colorimeters

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

| SYMBOL           | PARAMETER                   | MIN | MAX  | UNITS |  |
|------------------|-----------------------------|-----|------|-------|--|
| VBR              | Reverse Voltage             |     | 30   | V     |  |
| T <sub>STG</sub> | Storage Temperature         | -55 | +150 | ç     |  |
| To               | Operating Temperature Range | -40 | +125 | S     |  |
| Ts               | Soldering Temperature*      |     | +240 | S     |  |
| Ι                | Light Current               |     | 500  | mA    |  |



\*1/16 inch from case for 3 secs max

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

| SYMBOL | CHARACTERISTIC             | TESTCONDITIONS                          | MIN | TYP                   | MAX  | UNITS              |
|--------|----------------------------|---|-----|-----------------------|------|--------------------|
| lsc    | Short Circuit Current      | H = 100 fc, 2850 K                      | 45  | 65                    |      | μA                 |
| ΙD     | Dark Current               | $H = 0, V_{R} = 5 V$                    |     | 1                     | 5    | nA                 |
| Rsh    | Shunt Resistance           | $H = 0, V_{R} = 10 \text{ mV}$          | .25 | 1                     |      | GΩ                 |
| TC RSH | RSH Temp. Coefficient      | $H = 0, V_{R} = 10 \text{ mV}$          |     | -8                    |      | % / °C             |
| CJ     | Junction Capacitance       | $H = 0, V_{R} = 5 V^{**}$               |     | 40                    |      | рF                 |
| λrange | Spectral Application Range | Spot Scan                               | 190 |                       | 1100 | nm                 |
| R      | Responsivity               | $V_{_{ m R}}$ = 0 V, $\lambda$ = 254 nm | .12 | .18                   |      | A/W                |
| VBR    | Breakdown Voltage          | I = 10 μA                               | 15  | 25                    |      | V                  |
| NEP    | Noise Equivalent Power     | VR = 10 mV @ Peak                       |     | 1.4x10 <sup>-14</sup> |      | W/ <del>/ Hz</del> |
| tr     | Response Time              | $RL = 1 K\Omega V_R = 5 V$              |     | 56                    |      | nS                 |

Information in this technical data sheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.\*\*f=1 MHz [FORM NO. 100-PDU-C115 REV N/C]