



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!



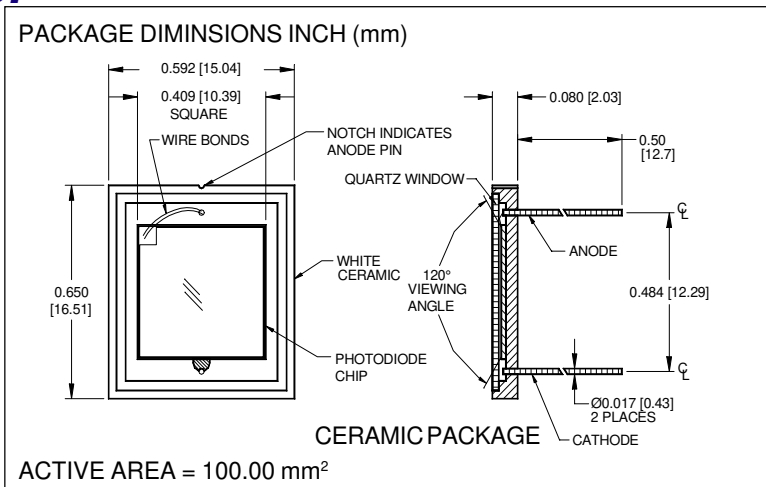
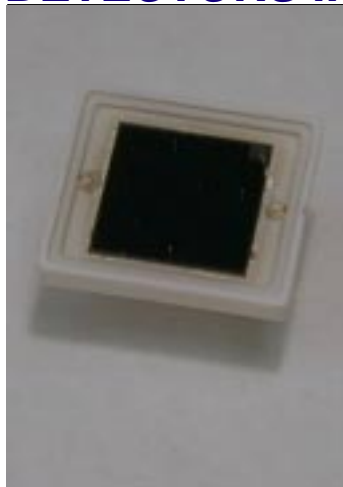
## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





### FEATURES

- Low noise
- U.V. enhanced
- High shunt resistance
- Quartz windows

### DESCRIPTION

The **PDU-V110** is a silicon, PIN planar diffused, U.V. enhanced photodiode. Ideal for low noise photovoltaic applications. Packaged in low profile ceramic substrate with a quartz window.

### APPLICATIONS

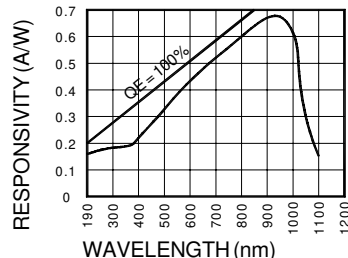
- Spectrometers
- Fluorescent analysers
- U.V. meters
- Colorimeters

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

| SYMBOL           | PARAMETER                   | MIN | MAX  | UNITS |
|------------------|-----------------------------|-----|------|-------|
| V <sub>BR</sub>  | Reverse Voltage             |     | 75   | V     |
| T <sub>STG</sub> | Storage Temperature         | -20 | +80  | °C    |
| T <sub>O</sub>   | Operating Temperature Range | -20 | +60  | °C    |
| T <sub>S</sub>   | Soldering Temperature*      |     | +220 | °C    |
| I <sub>L</sub>   | Light Current               |     | 0.5  | mA    |

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

### SPECTRAL RESPONSE



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

| SYMBOL             | CHARACTERISTIC                    | TEST CONDITIONS                  | MIN | TYP                   | MAX    | UNITS  |
|--------------------|-----------------------------------|----------------------------------|-----|-----------------------|--------|--------|
| I <sub>SC</sub>    | Short Circuit Current             | H = 100 fc, 2850 K               | 0.9 | 1.2                   |        | mA     |
| I <sub>D</sub>     | Dark Current                      | H = 0, V <sub>R</sub> = 10 mV    |     | 200                   | 333    | pA     |
| R <sub>SH</sub>    | Shunt Resistance                  | H = 0, V <sub>R</sub> = 10 mV    | 30  | 50                    |        | MΩ     |
| TC R <sub>SH</sub> | R <sub>SH</sub> Temp. Coefficient | H = 0, V <sub>R</sub> = 10 mV    |     | -8                    |        | % / °C |
| C <sub>J</sub>     | Junction Capacitance              | H = 0, V <sub>R</sub> = 0 V**    |     | 10,000                | 12,000 | pF     |
| λ <sub>range</sub> | Spectral Application Range        | Spot Scan                        | 190 |                       | 1100   | nm     |
| R                  | Responsivity                      | V <sub>R</sub> = 0 V, λ = 254 nm | .12 | .18                   |        | A/W    |
| V <sub>BR</sub>    | Breakdown Voltage                 | I = 10 μA                        | 5   | 10                    |        | V      |
| NEP                | Noise Equivalent Power            | V <sub>R</sub> = 10 mV @ Peak    |     | 2.0x10 <sup>-14</sup> |        | W/√Hz  |
| tr                 | Response Time                     | RL = 1 KΩ V <sub>R</sub> = 0 V   |     | 2000                  |        | nS     |