imall

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



PHOTONIC Silicon Photodiode, U.V. Enhanced Photoconductive DETECTORS INC. Type PDU-C119-Q



PACKAGE DIMENSIONS INCH [mm] QUARTZ WINDOW CAP-(WELDED) Ø0.325 [8.25] 0.168 [4.26] Ø0.250 [6.35] 0.030 [0.76] 0.075 [1.91] WIRE--0.500 [12.70] MIN VIEWING Ø0.358 [9.09] 0.200 [5.08] ANGI F 035 891 LC DY/////// -ANODE Ø0.018 [0.46] CATHODE Ø0.018 [0.46] HEADER PHOTODIODE -0.125 [3.18] 0.113 [2.87] CTIVE AREA **TO-5 CAN PACKAGE** 0.113 [2.87] ACTIVE AREA ACTIVE AREA = 7.95 mm²

FEATURES

High speed

• U.V. enhanced

Quartz window

DESCRIPTION

The **PDU-C119-Q** is a silicon, PIN planar diffused, U.V. enhanced photodiode. Ideal for high speed photoconductive U.V. applica- • U.V. meters tions.Packaged in a TO-5 metal can with a flat quartz window cap.

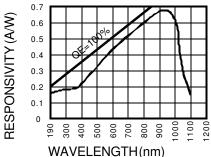
APPLICATIONS

- Spectrometers
- Fluorescent analysers
- Colorimeters

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

| SYMBOL | PARAMETER | MIN | MAX | UNITS | |
|------------------|-----------------------------|-----|------|-------|--|
| VBR | Reverse Voltage | | 30 | V | |
| T _{STG} | Storage Temperature | -55 | +150 | S | |
| То | Operating Temperature Range | -40 | +125 | с | |
| Ts | Soldering Temperature* | | +240 | с | |
| Ι | Light Current | | 500 | mA | |

SPECTRALRESPONSE



*1/16 inch from case for 3 secs max

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

| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|--------|----------------------------|---|-----|-----------------------|------|--------------------|
| lsc | Short Circuit Current | $\rm E_{c}$ = 0.1 mW/cm², λ =350 nm | .6 | 1.0 | | μA |
| ΙD | Dark Current | H = 0, V _R = 5 V | | 2.5 | 5 | nA |
| Rsh | Shunt Resistance | $H = 0, V_{R} = 10 \text{ mV}$ | 150 | 300 | | MΩ |
| TC RSH | RSH Temp. Coefficient | $H = 0, V_{R} = 10 \text{ mV}$ | | -8 | | % / °C |
| CJ | Junction Capacitance | $H = 0, V_{R} = 5 V^{**}$ | | 130 | | рF |
| λrange | Spectral Application Range | Spot Scan | 190 | | 1100 | nm |
| R | Responsivity | $V_{_{ m R}}$ = 0 V, λ = 254 nm | .12 | .18 | | A/W |
| VBR | Breakdown Voltage | I = 10 µ. A | 15 | 25 | | V |
| NEP | Noise Equivalent Power | V _R = 10 mV @ Peak | | 2.2x10 ⁻¹⁴ | | W/ / Hz |
| tr | Response Time | $RL = 1 K\Omega V_R = 5 V$ | | 58 | | 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 [FORMNO.100-PDU-C119-QREVA]