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!



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PHOTONIC Silicon Photodiode, U.V. Enhanced Photoconductive DETECTORS INC. Type PDU-C108-Q



PACKAGE DIMENSIONS INCH [mm] 0.215 [5.46] Ø0.483 [12.27] 0.065 [1.65] Ø0.449 [11.39] 1.500 [38.10] WIRE BONDS Ø0.550 VIEWING 0.295 [7.49] ANODE [13.97] ANGLE Ø0.018 [0.46] _____ Ιç CATHODE Ø0.018 [0.46] HEADER PHOTODIODE QUARTZ WINDOW CAP 0.265 [6.74] SQUARE (WELDED) 0.2472 [6.289] ACTIVE AREA TO-8 PACKAGE ACTIVE AREA = 31.00 mm^2

RESPONSIVITY (A/W)

FEATURES

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

DESCRIPTION

The **PDU-C108-Q** is a silicon, PIN planar diffused, U.V. enhanced photodiode. Ideal for high speed photoconductive applications. Packaged in a TO-8 metal can with a flat quartz window.

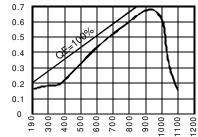
APPLICATIONS

- Spectrometers
- 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 _{STG}	Storage Temperature	-55	+150	S
To	Operating Temperature Range	-40	+125	с
Ts	Soldering Temperature*		+240	с
Ι	Light Current		500	mA

SPECTRALRESPONSE



WAVELENGTH(nm)

*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	400	460		μA			
ΙD	Dark Current	$H = 0, V_{R} = 5 V$		5	15	pА			
Rsh	Shunt Resistance	$H = 0, V_{R} = 10 \text{ mV}$	32	60		MΩ			
TC RSH	RsH Temp. Coefficient	H = 0, V _R = 10 mV		-8		% / °C			
CJ	Junction Capacitance	$H = 0, V_{R} = 5 V^{**}$		350		рF			
λrange	Spectral Application Range	Spot Scan	190		1100	nm			
R	Responsivity	$V_R = 0 V, \lambda = 254 \text{ nm}$.12	.18		A/W			
VBR	Breakdown Voltage	I = 10 µµA	15	25		V			
NEP	Noise Equivalent Power	V _R = 10 mV @ Peak		4x10 ⁻¹⁴		W/ / Hz			
tr	Response Time	$RL = 1 K\Omega V_R = 5 V$		110		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-C108-Q REV N/C]