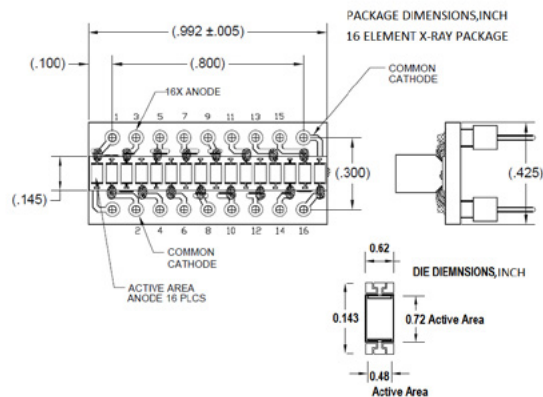
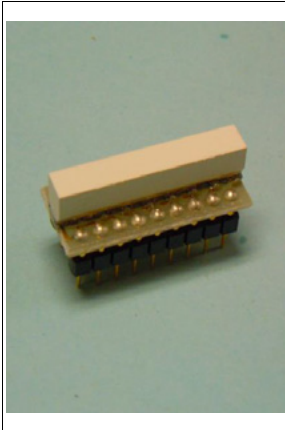


Silicon Photodiode Array with Scintillation Crystal

PDB-C216-C

Precision – Control – Results



DESCRIPTION

The **PDB-C216-C** is a common cathode monolithic silicon PIN photodiode 16-element array. Designed to be stacked end-to-end to form a line of pixels. Supplied with X-Ray Cs(Ti) scintillation crystals and packaged in a PCB with a terminal strip package

FEATURES

- Stackable
- Blue enhanced
- Low cost

RELIABILITY

This API high-reliability detector is in principle able to meet military test requirements (Mil-STD-750, Mil-STD-883) after proper screening and group test. Contact API for recommendations on specific test conditions and procedures.

APPLICATIONS

- Luggage X-Ray
- X-Ray scanner
- X-Ray inspection

ABSOLUTE MAXIMUM RATINGS

$T_a = 23^\circ\text{C}$ non condensing 1/16 inch from case for 3 seconds max

SYMBOL	MIN	MAX	UNITS
Reverse Voltage	-	50	V
Operating Temperature	-20	+100	$^\circ\text{C}$
Storage Temperature	-40	+75	$^\circ\text{C}$
Soldering Temperature	-	+260	$^\circ\text{C}$

Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.

REV 05-18-15

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OPTO-ELECTRICAL PARAMETERS

$T_a = 23^\circ\text{C}$ unless noted otherwise

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Breakdown Voltage	$I_{\text{bias}} = 10 \mu\text{A}$	15	30	-	V
Shunt Resistance	$V_{\text{bias}} = 10 \text{ mV}$	100	200	-	$\text{M}\Omega$
Dark Current	$V_{\text{bias}} = 5\text{V}$	-	5	50	nA
Junction Capacitance	$V_{\text{bias}} = 0\text{V}; f = 0 \text{ MHz}$	-	40	60	pF
Rise Time (50 Ω load)	$V_{\text{bias}} = 10\text{V}$	-	15	-	ns
Noise Equivalent Power	$V_{\text{bias}} = 10\text{V}; @ \text{ Peak}$	-	2	-	$10^{-14} \text{ W/Hz}^{0.5}$
RSH Temp. Coefficient	$V_{\text{bias}} = 10\text{V}$	-	-8	-	%/C

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