

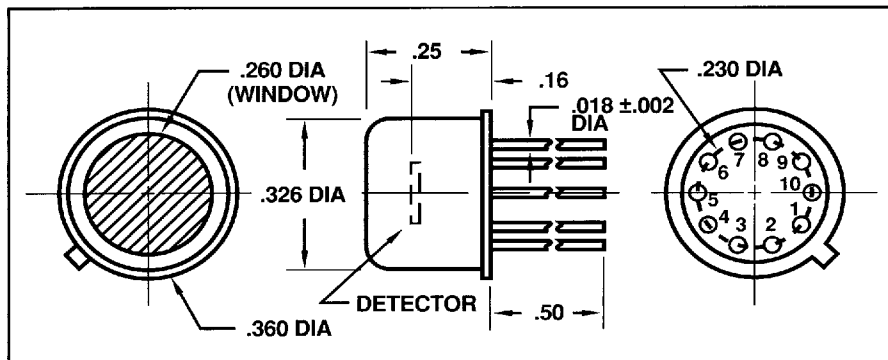
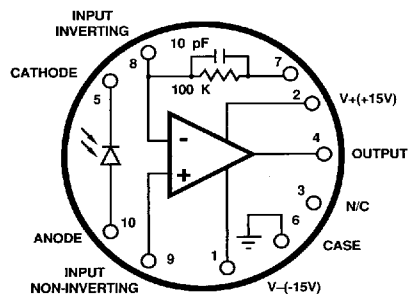
The OSI 5-DEV Universal Sensor/Op Amp is a development system for low light level conditions where amplification is required. The OSI 5-DEV provides your designer with a flexible component for experimental purposes.

This efficient low/noise development system combines sensor and op/amp into one compact building block with all key circuit points accessible via a 10-lead TO5 package.

Centronic can supply several configurations of the basic device, select several types of sensor chips (up to 5mm² area), and apply a variety of filter elements up to 1mm thick. This allows your design engineer to define your basic requirements. Centronic can then "fine tune" the design and produce first article custom devices to fit your application perfectly.

OSI 5-DEV

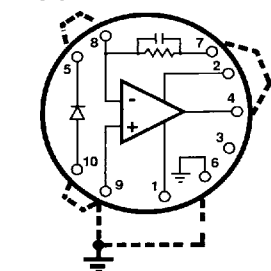
Standard Configuration Schematic:



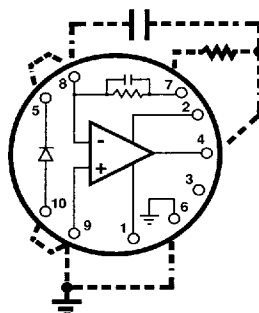
Package Outline - inches

- 1 - Photodiode: OSD 5-0
Active Area: 5mm²
- 2 - Op Amp: PMI OP12
- 3 - Supply Voltage: $\pm 15V$
- 4 - Clear Window, No Filter
- 5 - UV Enhanced Option Available OSI 5-DEV-UV

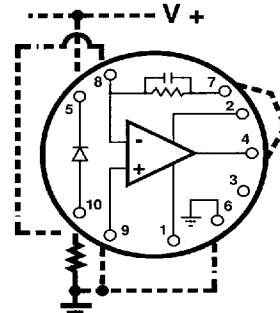
Application Options



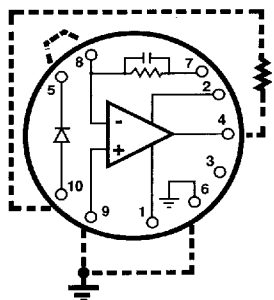
DETECTOR IN
PHOTOVOLTAIC MODE



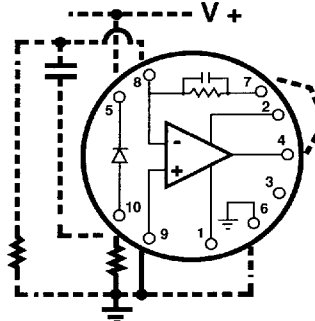
PHOTOVOLTAIC WITH
ADDED EXTERNAL GAIN



PHOTOCONDUCTIVE
(REVERSE BIASED)



LOGARITHMIC
OUTPUT



CAPACITIVE (AC)
COUPLED



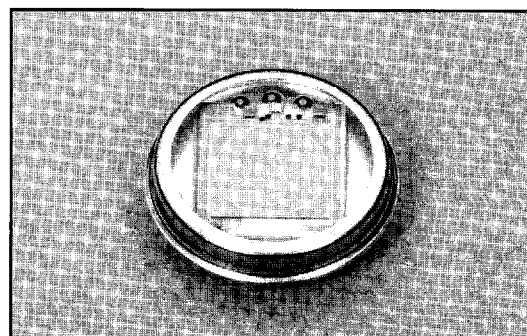
CENTRONIC INC.
2088 Anchor Court
Newbury Park, CA 91320
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For Sales and Technical Assistance Please Call:

805-499-5902

Optical Silicon Integrated Detector

The OSI Series integrates Centronic high performance single element photodiodes with selected operational amplifiers in a single hybrid package. The photo response and transimpedance gain of the devices can be tailored to fit any application. Custom designs are welcome including multi-channel, thermo electricity cooled, fiber-coupled, and others to fit your application.

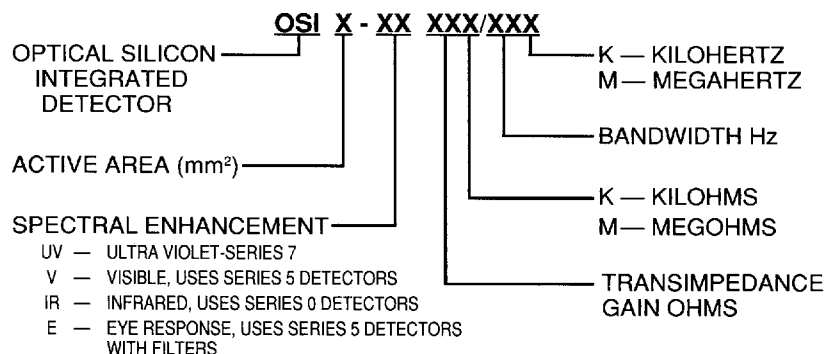


Hybrid Selection Guide

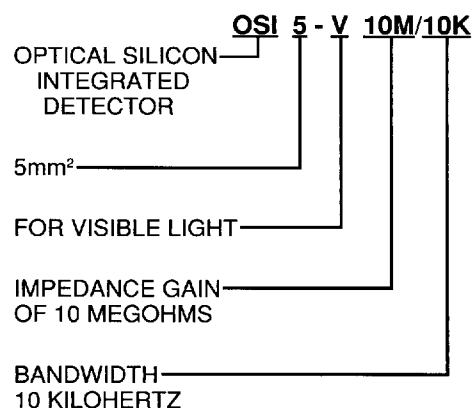
Type No.	Active Area mm ²	Gain Ohm	Bandwidth Hz	Spectral Enhancement at				Peak Responsivity V/μW	Typical NEP WHz ^{-1/2}	Typical Min. Power Level μW at 900nm	Typical Sat. Power Level μW at 900nm	Package
				UV	V	IR	E					
BPX65-100	1	-	150M	SEE PAGE 27-28 FOR MORE INFORMATION								8
OSI 1-XX-300K/10M	1	300k	10M	◇	◇	◇	-	0.15	2×10^{-12}	7×10^{-3}	26	*
OSI 5-XX-10M/10K	5	10M	10k	◇	◇	◇	◇	5.8	1.5×10^{-12}	2×10^{-4}	2	*
OSI 5-XX-50M/2K	5	50M	2k	-	◇	◇	-	29	6×10^{-13}	4×10^{-5}	0.4	*
OSI 5-XX-100M/1K	5	100M	1k	-	◇	◇	-	58	1×10^{-13}	4×10^{-5}	0.23	*
OSI 5-XX-500M/10K	5	500M	10k	-	◇	◇	-	250	1×10^{-13}	1×10^{-13}	0.05	*
OSI 15-XX-100K/25K	15	100k	25k	-	◇	◇	-	5.8×10^{-2}	6×10^{-12}	5×10^{-4}	200	*
OSI 35-XX-1M/2K5	35	1M	2.5k	-	◇	◇	-	5.8×10^{-1}	6×10^{-12}	4×10^{-4}	22	*
OSI 50-XX-40K/20M	50	40k	20M	-	◇	◇	-	3×10^{-2}	3×10^{-11}	0.15	130	*
OSI 100-XX-40K/15M	100	40k	15M	-	◇	◇	-	3×10^{-2}	3×10^{-11}	0.15	130	*
OSI 5-DEV	5	100k	100k	◇	◇	◇	◇	5.8	1.5×10^{-12}	2×10^{-4}	2	Page 29

*For Package Drawings please consult Factory.

ORDERING INFORMATION



EXAMPLE



Complete technical data for each hybrid series are available upon request.



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