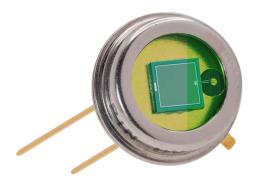


A Division of OSI Optoelectronics

## APX-Si0080E

# 8mm<sup>2</sup> Eye Response Detector



#### FEATURES

- Wide view angle
- Human eye response
- Low noise, low capacitance
- Hermetic package

#### DESCRIPTION

The **APX-Si0080E** is an 8mm<sup>2</sup> active area silicon, PIN photodiode detector filter combination with a wide bandwidth designed to simulate the spectral response of the human eye. Packaged in a hermetic TO-5 can.

#### **APPLICATIONS**

- Photometry
- Radiometry
- Film color processing

#### > Absolute Maximum Ratings

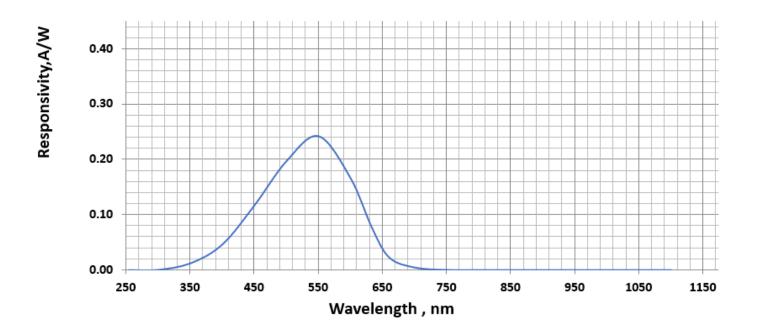
Part No.	Wavelength Range [nm]	Reverse Voltage [V]	Operating Temperature [C]	Storage Temperature [C]	Package
APX-Si0080E	350 to 820	100	-40 to +85	-50 to +100	TO-5

#### > Electrical and Optical Characteristics

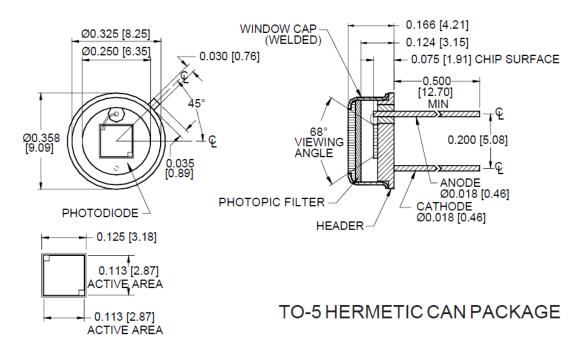
Typical Characteristics (T=23°C unless specified)									
Parameter	Test Conditions	Symbol	Min	Typical	Max	Unit			
Dark Current	V <sub>R</sub> =10V	ΙD	-	5	20	nA			
Shunt Resistance	V <sub>R</sub> =10mV	$R_{sh}$	150	300	-	MΩ			
Junction Capacitance	V <sub>R</sub> =10V, <i>f</i> =1MHz	CJ		60	150	pF			
Spectral Range	Flooded	Δλ	350	-	820	nm			
Responsivity	$\lambda$ =550nm, V <sub>R</sub> =0V	R		0.3	-	A/W			
Breakdown Voltage	I=10μA	VBR	75	100	-	V			
Noise Equivalent Power	V <sub>R</sub> =5V @ $\lambda$ =550nm	NEP	-	9X10 <sup>-14</sup>	-	W/ $\sqrt{Hz}$			
Forward Voltage	I <sub>f</sub> =10mA	VF	-	0.75	1.0	V			
Response Time	RL=1k $\Omega$ , V <sub>R</sub> =10V	tr		50		nS			

## APX-Si0080E

### > Typical Spectral Response



> Package Dimensions in inches [mm]



> Soldering Conditions: 260°C 1/16 inch away from case for 3 seconds max.

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## MATERIALS SAFETY

This product is free of conflict minerals and meets REACH compliance. Please see website for reports.