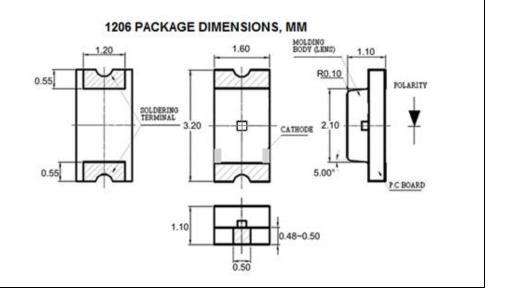


# Surface-Mount Photodiode Assembly SD040-111-411

### Precision – Control – Results





#### DESCRIPTION

The **SD019-111-411** is a high sensitivity, low noise silicon PIN photodiode with 0.79mm<sup>2</sup> active area, mounted in a 1206 package.

#### FEATURES

Small Footprint

**APPLICATIONS** 

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Industrial Sensors

Light Management

Handheld Devices

- Low Capacitance
- High Speed

#### 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.

#### **ABSOLUTE MAXIMUM RATINGS**

			-
PARAMETER	MIN	MAX	UNITS
Reverse Voltage	-	50	V
Operating Temperature	-40	+105	°C
Storage Temperature	-50	+125	°C
Soldering Temperature	-	+260	°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.

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T<sub>a</sub> = 25°C UNLESS OTHERWISE NOTED



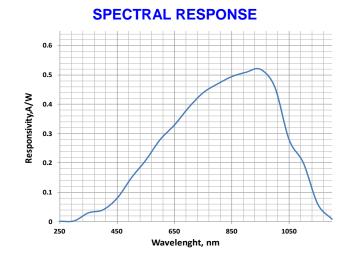
# Surface-Mount Photodiode Assembly SD040-111-411

### WWW.ADVANCEDPHOTONIX.COM

Precision – Control – Results

OPTO-ELECTRICAL PARAMETERS			Ta	$T_a = 23^{\circ}C$ unless noted otherwise		
PARAMETER	TEST CONDITIONS	MIN	ТҮР	MAX	UNITS	
Forward Voltage	I <sub>f</sub> =10 mA	0.5	0.8	1.3	V	
Light Current (2856K)	$V_R = 5V; H = 1000 lux$	-	9.0	-	μA	
Breakdown Voltage	I <sub>R</sub> = 100 μA	50	-	-	V	
Shunt Resistance	$V_{\text{bias}} = 10 \text{ mV}$	-	1.0	-	GΩ	
Dark Current	V <sub>R</sub> = 10 V	-	-	0.5	nA	
Junction Capacitance	$V_{R} = 5V; f = 1000 \text{ kHz}$	-	20	-	pF	

## **TYPICAL PERFORMANCE**



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