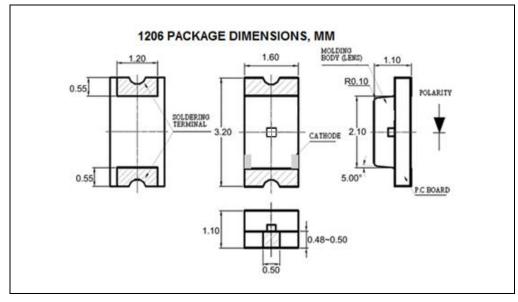


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Precision – Control – Results





DESCRIPTION

The **SD040-101-411** is a high sensitivity low noise UV enhanced 0.79mm² active area silicon photodiode, assembled in a 1206 package.

FEATURES

- Small Footprint
- Low Capacitance
- High Speed
- UV Enhanced

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

- Industrial Sensors
- Light Management
- Handheld Devices

ABSOLUTE MAXIMUM RATINGS

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

T_a = 25°C UNLESS OTHERWISE NOTED

Surface-Mount Photodiode Assembly

SD040-101-411

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OPTO-ELECTRICAL PARAMETERS

 $T_a = 23$ °C unless noted otherwise

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Forward Voltage	I _f =10 mA	0.5	0.8	1.3	V
Light Current (2856K)	$V_R = 5V$; H = 1000 lux	-	9.0	-	μA
Breakdown Voltage	$I_R = 100 \mu A$	50	-	-	V
Shunt Resistance	$V_{\text{bias}} = 10 \text{ mV}$	-	1.0	-	$G\Omega$
Dark Current	V _R = 10 V	-	-	0.5	nA
Junction Capacitance	$V_R = 5V$; $f = 1000 \text{ kHz}$	-	20	-	pF

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

