



FEATURES

- Small Footprint
- Low Capacitance
- High Speed

DESCRIPTION

The **SD040-111-411** is a high sensitivity, low noise silicon PIN photodiode with 0.79mm² active area, mounted in a 1206 package.

APPLICATIONS

- Industrial Sensing
- Light Management
- Handheld Devices

> Absolute Maximum Ratings

Part No.	Wavelength Range [nm]	Reverse Voltage [V]	Operating Temperature [C]	Storage Temperature [C]	Package
SD040-111-411	300 to 1100	50	-40 to +105	-50 to +125	1206

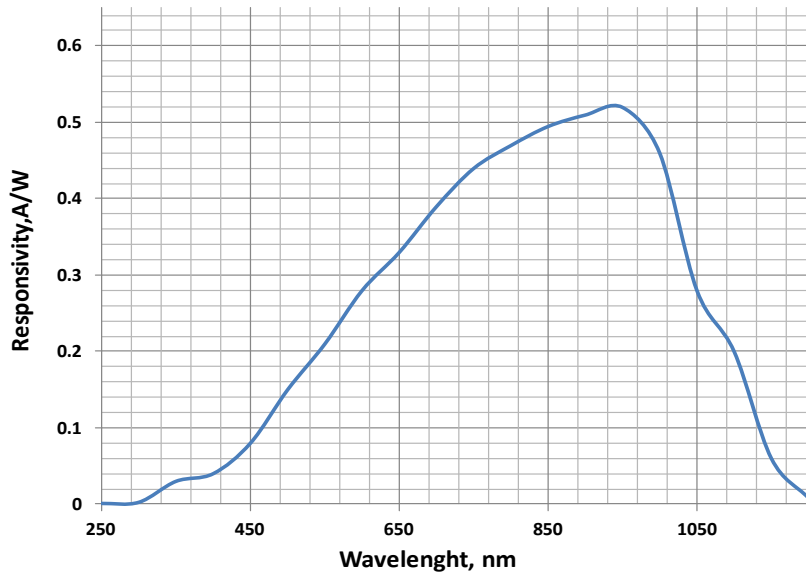
> Electrical and Optical Characteristics

Typical Characteristics (T=23°C unless specified)						
Parameter	Test Conditions	Symbol	Min	Typical	Max	Unit
Forward Voltage	I _F =10 mA	V _F	0.5	0.8	1.3	V
Light Current (2856K)	V _R = 5V; H = 1000 lux	I _L	-	9.0	-	μA
Breakdown Voltage	I=100 μA	V _{BD}	50	-	-	V
Shunt Resistance	V _{bias} = 10 mV	R _{SH}	-	1.0	-	GΩ
Dark Current	V _R = 10 V	I _D	-	-	0.5	nA
Junction Capacitance	V _R =5V; f = 1000 kHz	C _J	-	20	-	pF

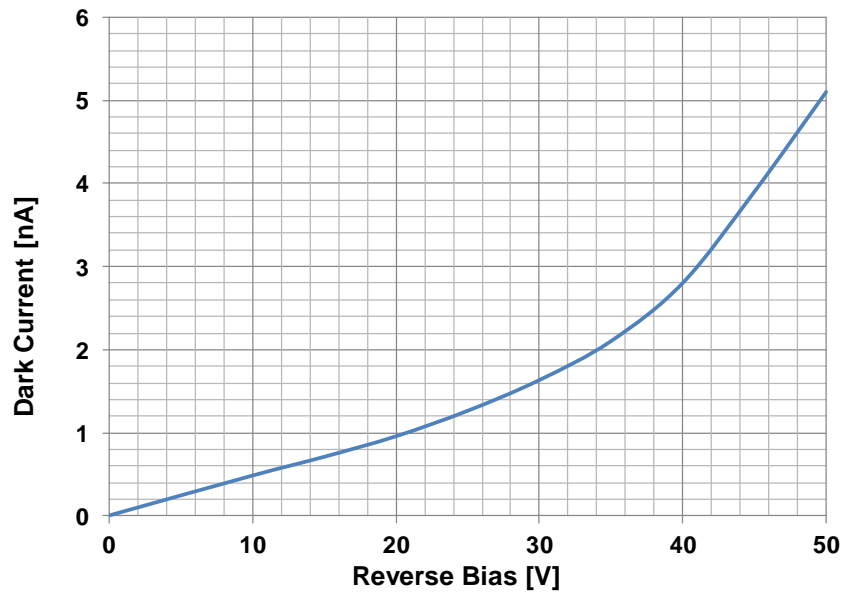
> Soldering

Recommendation		
Wave	Not Advised	-
IR Oven Reflow	Allowed	See Reflow Profile
Forced Convection Reflow	Recommended	See Reflow Profile
Convection Reflow	Recommended	See Reflow Profile
Vapor Phase Reflow	Recommended	See Reflow Profile
Manual	Not Advised	260°C for 3 seconds max.
Moisture Sensitivity Level	3	J-STD-033

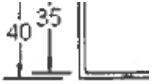
> Spectral Response



> Dark Current VS Reverse Bias



> 1206 Package [SD040-111-411]



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MATERIALS SAFETY

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