



**DESCRIPTION**

The **SD040-101-411** is a high sensitivity low noise UV enhanced 0.79mm<sup>2</sup> active area silicon photodiode, assembled in a 1206 package.

**FEATURES**

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

**RELIABILITY**

This Luna high-reliability device is in principle able to meet military test requirements (Mil-STD-750, Mil-STD-883) after proper screening and group test. Contact Luna for recommendations on specific test conditions and procedures.

**APPLICATIONS**

- Industrial Sensors
- Light Management
- Handheld Devices

**ABSOLUTE MAXIMUM RATINGS**

SYMBOL	MIN		MAX	UNITS	
Reverse Voltage	-	-	50	V	T <sub>a</sub> = 23°C UNLESS OTHERWISE NOTED
Storage Temperature	-50	-	+125	°C	-
Operating Temperature	-40	to	+105	°C	-
Soldering Temperature	-	-	+260	°C	-

**OPTO-ELECTRICAL PARAMETERS**

T<sub>a</sub> = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Forward Voltage	I <sub>f</sub> =10 mA	0.5	0.8	1.3	V
Light Current (2856K)	V <sub>R</sub> = 5V; H=1000 lux	-	9.0	-	μA
Breakdown Voltage	I <sub>R</sub> =100 μA	50	-	-	V
Shunt Resistance	V <sub>bias</sub> = 10 mV	-	1.0	-	GΩ
Dark Current	V <sub>R</sub> = 10 V	-	-	0.5	nA
Junction Capacitance	V <sub>R</sub> =5V; f = 1000 kHz	-	20	-	pF

**TYPICAL PERFORMANCE**

**SPECTRAL RESPONSE**

