



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 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 _a = 23°C UNLESS OTHERWISE NOTED |
| Storage Temperature | -50 | +125 | °C | - |
| Operating Temperature | -40 | +105 | °C | - |
| Soldering Temperature | - | +260 | °C | - |

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 μA | 50 | - | - | V |
| Shunt Resistance | V _{bias} = 10 mV | - | 1.0 | - | GΩ |
| Dark Current | V _R = 10 V | - | - | 0.5 | nA |
| Junction Capacitance | V _R =5V; f = 1000 kHz | - | 20 | - | pF |

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

