



DESCRIPTION

The **SD 019-111-411** is a silicon PIN 0.18mm² active area photodiode, assembled in a 0805 SMT package.

FEATURES

- Small Footprint
- Low Capacitance
- High Speed

RELIABILITY

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	$T_a = 23^{\circ}\text{C}$ UNLESS OTHERWISE NOTED
Storage Temperature	-50	125	$^{\circ}\text{C}$	-
Operating Temperature	-40	+105	$^{\circ}\text{C}$	-
Soldering Temperature*	-	+260	$^{\circ}\text{C}$	-

* 1/16 inch from case for 3 seconds max.

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	-	3.2	-	μA
Breakdown Voltage	I _R = 100 μA	0.550	-	-	V
Shunt Resistance	V _{bias} = 10 mV	-	2.0	-	GΩ
Dark Current	V _R = 10 V	-	-	0.5	nA
Junction Capacitance	V _R = 5V; f = 1000 kHz	-	6.0	-	pF
Rise Time	V _R = 3V; R _i = 1000Ω	-	1.0	-	μS

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

