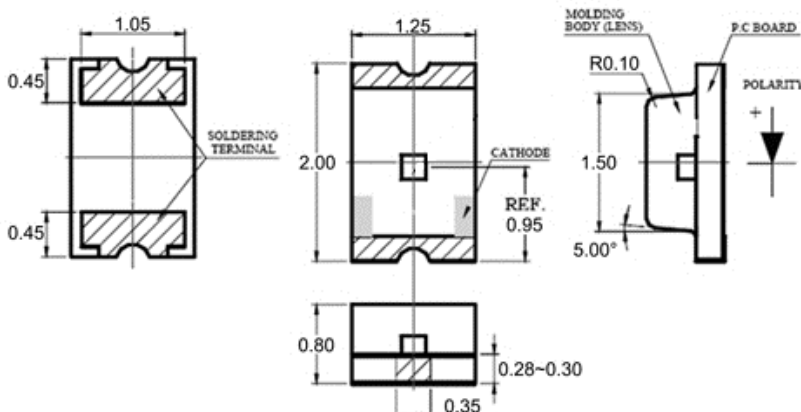


0805 PACKAGE DIMENSIONS, MM



**DESCRIPTION**

The **SD 019-111-411** is a silicon PIN 0.18mm<sup>2</sup> active area photodiode, assembled in a 0805 SMT package.

**FEATURES**

- Small Footprint
- Low Capacitance
- High Speed

**RELIABILITY**

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	V
Operating Temperature	-40	+105	°C
Storage Temperature	-50	+125	°C
Soldering Temperature*	-	+260	°C

T<sub>a</sub> = 25°C UNLESS OTHERWISE NOTED

Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.

**OPTO-ELECTRICAL PARAMETERS**

$T_a = 23^\circ\text{C}$  unless noted otherwise

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Forward Voltage	$I_f = 10 \text{ mA}$	0.5	0.8	1.3	V
Light Current (2856K)	$V_R = 5 \text{ V}; H = 1000 \text{ lux}$	-	3.2	-	$\mu\text{A}$
Breakdown Voltage	$I_R = 100 \mu\text{A}$	50	-	-	V
Shunt Resistance	$V_{\text{bias}} = 10 \text{ mV}$	-	2.0	-	$\text{G}\Omega$
Dark Current	$V_R = 10 \text{ V}$	-	-	0.5	nA
Junction Capacitance	$V_R = 5 \text{ V}; f = 1000 \text{ kHz}$	-	6.0	-	pF
Rise Time	$V_R = 3 \text{ V}; R_i = 1000\Omega$	-	1.0	-	$\mu\text{S}$

**TYPICAL PERFORMANCE**

**SPECTRAL RESPONSE**

