



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



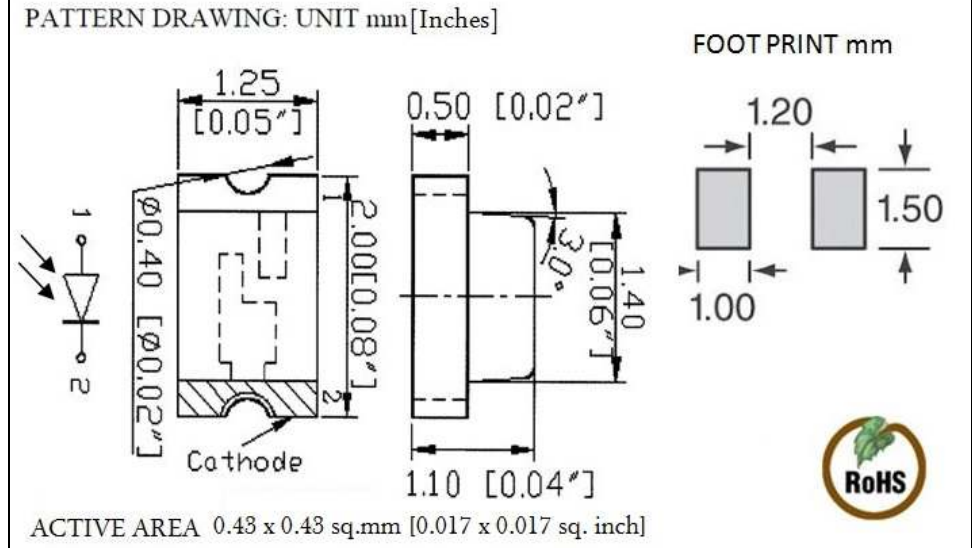
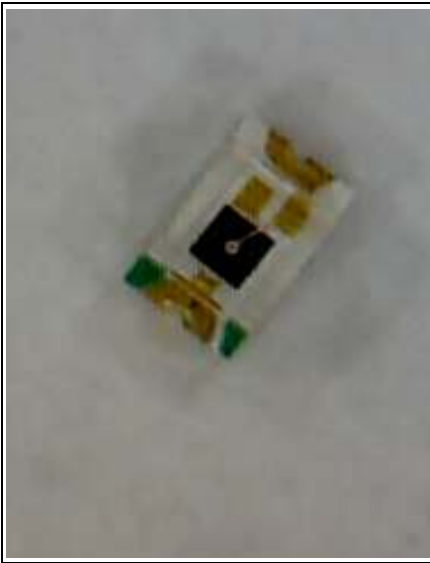
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### FEATURES

- Small Footprint
- Low Capacitance
- High Speed

### DESCRIPTION

The **SD019-111-411** is a silicon photodiode assembled in a 0805 SMT package.

### APPLICATIONS

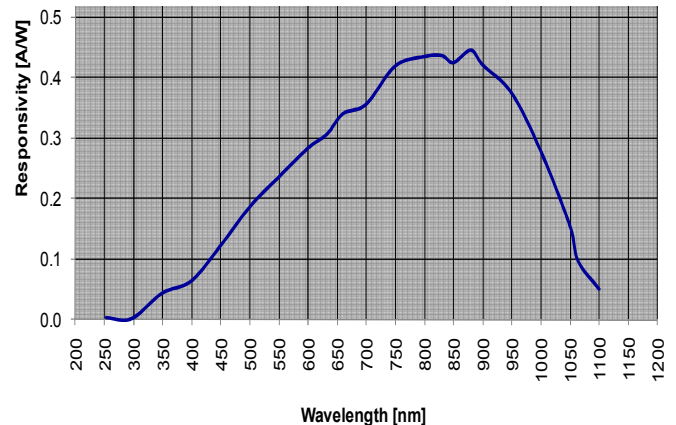
- Industrial Sensors
- Light Management
- Handheld Devices

### ABSOLUTE MAXIMUM RATING

$T_a = 25^\circ\text{C}$  UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	MAX	UNITS
$V_R$	Reverse Voltage		50	V
$T_{Op}$	Operating Temperature	-40	+105	$^\circ\text{C}$
$T_{Stg}$	Storage Temperature	-50	+125	$^\circ\text{C}$
$T_S$	Soldering Temperature*		+260	$^\circ\text{C}$

### TYPICAL SPECTRAL RESPONSE



### ELECTRO-OPTICAL CHARACTERISTICS RATING

$T_a = 25^\circ\text{C}$ , UNLESS OTHERWISE NOTED

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$V_f$	Forward Voltage	$I_f = 10\text{ mA}$	0.5	0.8	1.3	V
$I_L$	Light Current (2856K)	$V_R = 5\text{V}; H = 1000\text{ lux}$	-	3.2	-	$\mu\text{A}$
$V_{br}$	Breakdown Voltage	$I_R = 100\text{ }\mu\text{A}$	50	-	-	V
$R_{sh}$	Shunt Resistance	$V_{bias} = 10\text{ mV}$	-	2.0	-	$\text{G}\Omega$
$I_d$	Dark Current	$V_R = 10\text{ V}$	-	-	0.5	nA
$C_j$	Junction Capacitance	$V_R = 5\text{V}; f = 1000\text{ kHz}$	-	6.0	-	pF
$t_r$	Rise Time	$V_R = 3\text{V}; R_L = 1000\Omega$	-	1	-	$\mu\text{s}$

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