



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!



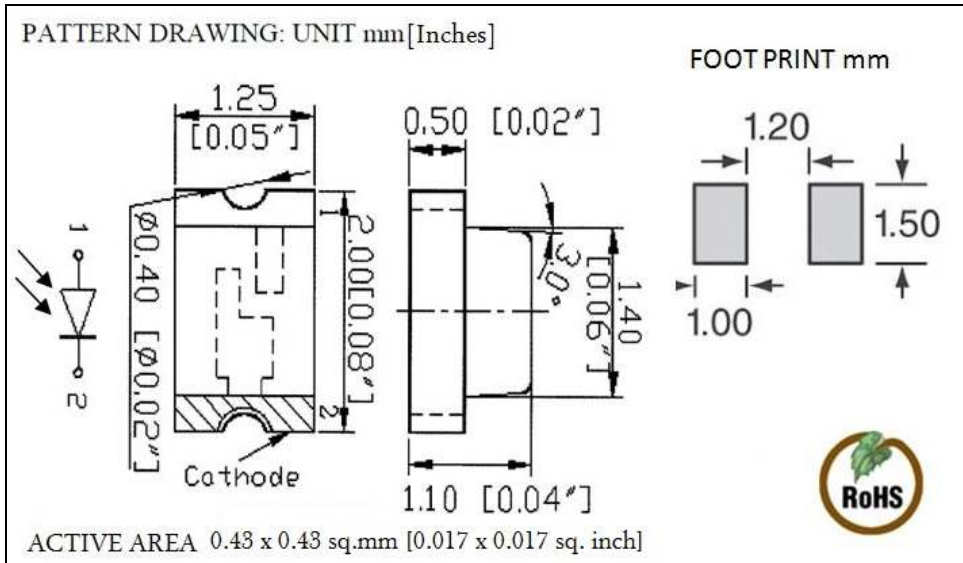
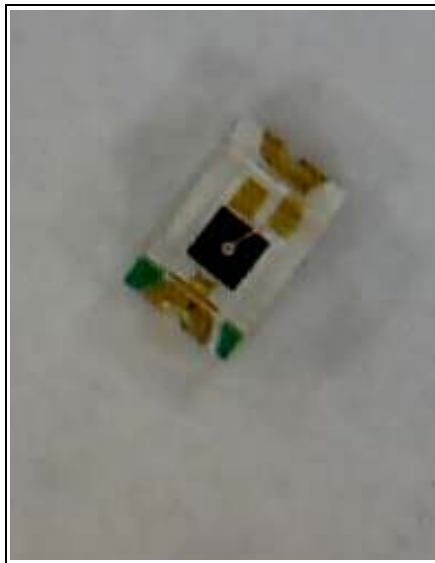
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FEATURES

- Small Footprint
- Low Capacitance
- High Speed

DESCRIPTION

The **SD 019-141-411** is a silicon photodiode assembled in a 0805 SMT package with an integrated bandpass filter. Three standard wavelength ranges are available.

APPLICATIONS

- Industrial Sensors
- Light Management
- Handheld Devices

ORDERING INFORMATION

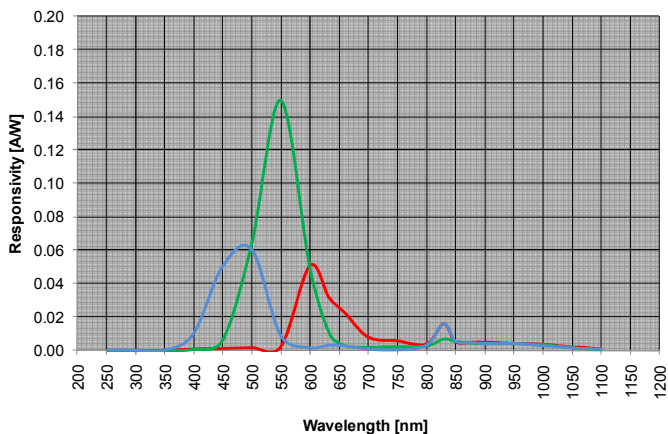
PART NUMBER	BAND PASS	RANGE [nm]
SD019-141-411 - R	Red	625 – 655
SD019-141-411 - G	Green	510 – 540
SD019-141-411 - B	Blue	435 – 465

ABSOLUTE MAXIMUM RATING

T_a = 25°C UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	MAX	UNITS
V _R	Reverse Voltage		50	V
T _{Op}	Operating Temperature	-40	+105	°C
T _{Stg}	Storage Temperature	-50	+125	°C
T _S	Soldering Temperature*		+260	°C

TYPICAL SPECTRAL RESPONSE



ELECTRO-OPTICAL CHARACTERISTICS RATING

T_a = 25°C, UNLESS OTHERWISE NOTED

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
V _f	Forward Voltage	I _f = 10 mA	0.5	0.8	1.3	V
R	Responsivity (-R)	V _R = 0V; λ = 450 nm	-	0.06	-	A/W

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Filtered SMT Photodiode Assembly

**SD 019-141-411 -R
-G
-B**

ELECTRO-OPTICAL CHARACTERISTICS RATING

T_a = 25°C, UNLESS OTHERWISE NOTED

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
R	Responsivity (-G)	V _R = 0V; λ = 550 nm	-	0.12	-	A/W
R	Responsivity (-B)	V _R = 0V; λ = 625 nm	-	0.05	-	A/W
V _{br}	Breakdown Voltage	I _R = 100 μA	50	-	-	V
R _{sh}	Shunt Resistance	V _{bias} = 10 mV	-	2.0	-	GΩ
I _d	Dark Current	V _R = 10 V	-	-	0.5	nA
C _j	Junction Capacitance	V _R = 5V; f = 1000 kHz	-	6.0	-	pF
t _r	Rise Time	V _R = 3V; R _i = 1000Ω	-	10	-	nS

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