



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!



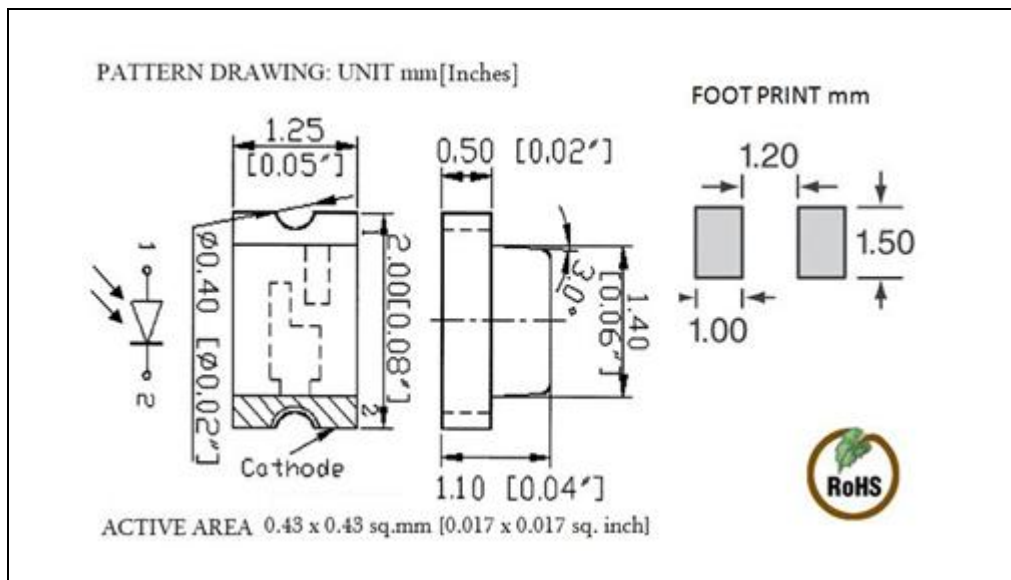
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DESCRIPTION

The **SD019-141-411 IR920** is an IR band-pass filtered Silicon Photodiode, assembled in a 0805 SMT package.

FEATURES

- Small Footprint
- Low Capacitance
- High Speed

RELIABILITY

This API high-reliability detector is in principle able to meet military test requirements (Mil-STD-750, Mil-STD-883) after proper screening and group test.

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	T _a = 23°C non condensing
Operating Temperature	-40	+105	°C	
Storage Temperature	-50	+125	°C	see recommended reflow profile
Soldering Temperature*	-	+260	°C	

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.

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

OPTO-ELECTRICAL PARAMETERS

CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Forward Voltage	$I_f = 10\text{ mA}$	0.5	0.8	1.3	V
Breakdown Voltage	$I_R = 100\ \mu\text{A}$	50	-	-	V
Shunt Resistance	$V_{\text{bias}} = 10\text{ mV}$	-	2	-	$\text{G}\Omega$
Dark Current	$V_R = 10\text{ V}$	-	20	500	pA
Junction Capacitance	$V_R = 5\text{ V}; f = 1000\text{ kHz}$	-	6.0	-	pF
Rise Time @ 920 nm	$V_R = 3\text{ V}; R_i = 1000\Omega$	-	-	1.0	N nS
Responsivity (-IR)	$V_R = 0\text{ V}; \lambda = 920\text{ nm}$	-	0.4	-	A/W

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

