



## SPD19-C



### TECHNICAL DATA

## Silicone PD, SMD package

SPT19-C is a surface mount type PIN-photodiode containing a chip with 0.44x0.44 mm active area, mounted into a ceramic package and covered with silicone. This device is featuring excellent responsibility of 6 ns and a high photocurrent. It's designed to be easy of setting up optically with a wide angle of half sensitivity of  $\pm 40$  degrees.

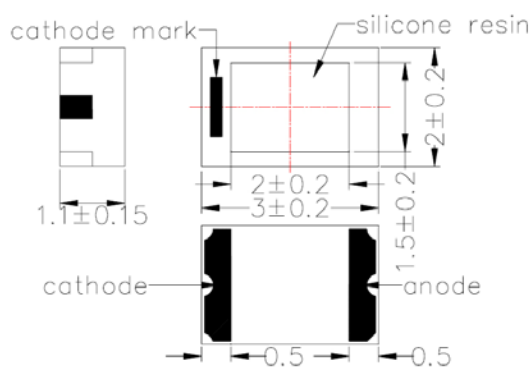
### Specifications

- Spectral Responsivity (Peak): 900 nm
- Chip Size: 0.6 x 0.6 mm
- Active Area: 0.44 x 0.44 mm
- Package: SMD
- Type: Ceramics
- Resin Material: Silicone

### Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$ )

Item	Symbol	Value	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	170	V
Operating Temperature	$T_{opr}$	-25 ... +100	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-30 ... +125	$^\circ\text{C}$
Soldering Temperature * <sup>1</sup>	$T_{sol}$	255	$^\circ\text{C}$

\*<sup>1</sup> must be completed within 3 seconds



(Unit: mm)

### Electro-Optical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse Photo Current	$I_L$	$V_R=10V, L=1000Lx$	-	6	-	$\mu\text{A}$
Reverse Dark Current	$I_D$	$V_R=10V$	-	-	10	nA
Open Circuit Voltage	$V_{OC}$	$V_R=10V, L=1000Lx$	-	390	-	mV
Spectral Responsivity (Peak)	$\lambda_P$		-	900	-	nm
Half Angle of Sensitivity	$\Theta_{1/2}$			$\pm 40$	-	deg
Total Capacitance	$C_T$	$V_R=10V, f=1\text{MHz}$	-	6	-	pF
Rise Time (10-90%)	$t_r$	$R_L=1K\Omega, V_R=10V$	-	6	-	ns
Fall Time (10-90%)	$t_f$		-	6	-	ns

**Note:** The above specifications are for reference purpose only and subjected to change without prior notice.