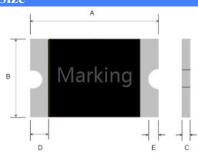
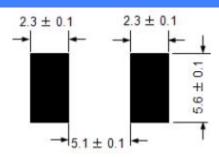


# SMD2920-185-16V

# Shape and Size





Terminal pad materials: Tin-Plated Nickle-copper

Terminal pad solderability: Meets EIA specification RS 186-9E and ANSI/J-STD-002 Category 3.

Dimention(Unit: mm)							
Model	Α		В		С		D
	Min.	Max.	Min.	Max.	Min.	Max	Min.
SMD2920-185-16V	6.73	7.98	4.80	5.44	0.30	0.90	0.30

### Performance Ratings:

2 01 101 111111100 111111111501										
Model $V_{max}$ $I_{max}$ $(V_{dc})$ $(A)$	$V_{max}$	V <sub>max</sub> I <sub>max</sub>	I <sub>hold</sub> @25℃	l <sub>trip</sub>	P <sub>d</sub>	Maximum Time To Trip		Resistance		
	(A)	(A)	<b>@25℃</b> (A)	Typ (W)	Current	Time	Ri <sub>min</sub>	Ri <sub>typ</sub>	R1 <sub>max</sub>	
					(A)	(Sec)	(Ω)	(Ω)	(Ω)	
SMD2920-185	16.0	100	1.85	3.70	1.500	8.00	2.5	0.030	0.040	0.150

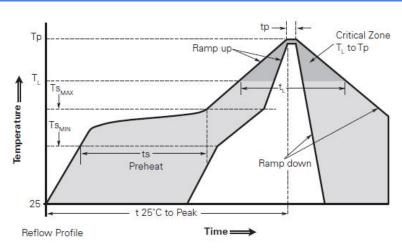
# **Test Conditons and Standards:**

I <sub>tem</sub>	Test Conditon	Standard
Initial Resistance	<b>25</b> ℃	0.030∼0.150Ω
lн	25℃,1.85A,60min	No Trip
Ttrip	25℃,8.00A	≤2.5s
Trip endurance	16V,100A,1hr	No arcing or burning

Operating Temperature:  $-40^{\circ}$ C TO  $85^{\circ}$ C

Packaging: Bulk 1500 pcs per bag

### Solder Reflow Conditions





Profile Feature	Pb-Free Assembly	
<ul> <li>Average ramp up rate(TS<sub>MAX</sub> to TP)</li> </ul>	3°C/Second max	
Preheat		
●Temperature min (TS <sub>MIN</sub> )	<b>150</b> ℃	• Recommended reflow methods: IR, vapor phase
<ul><li>Temperature max (TS<sub>MAX</sub>)</li></ul>	<b>200</b> ℃	oven, hot air oven, N2 environment for lead-free.
●Time(TS <sub>MIN</sub> to TS <sub>MAX</sub> )	60-120 Seconds	<ul> <li>Devices are not designed to be wave soldered to</li> </ul>
Time maintained above:		the bottom side of the board.
<ul><li>Temperature(T<sub>L</sub>)</li></ul>	<b>217</b> ℃	• Recommended maximum paste thickness is
<ul><li>Time(T<sub>L</sub>)</li></ul>	60-150 Seconds	0.25mm (0.010inch).
<ul><li>Peak/Classification temperature(TP)</li></ul>	260℃	<ul> <li>Devices can be cleaned using standard industry</li> </ul>
Time within5 <sup>°</sup> C ofactual peak temperature		methods and solvents.
•Time(TP)	30 Seconds max	<ul> <li>Soldering temprature profile meets RoHs</li> </ul>
•Ramp down rate	3°C Second max	leadfree process.
$ullet$ Time 25 $^{\circ}$ C to peak temperature	8 minutes max	

Notes: If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements

Note: All temperatures refer topside of the package.measured

#### Storage

on The package body surface

The maximum ambient temperature shall not exceed  $38\,^\circ\mathrm{C}$ . Storage temperatures higher than  $38\,^\circ\mathrm{C}$  could result in the deformation of packaging materials. The maximum relative humidity recommended for storage is 60%. High humidity with high temperature can accelerate the oxidation of the solder plating on the termination and reduce the solderability of the components. Sealed plastic bags with desiccant shall be used to reduce the oxidation of the termination and shall only be opened prior to use. The products shall not be stored in areas where harmful gases containing sulfur or chlorine are present

#### Warning

Use PPTC beyond the maximum ratings or improper use may result in device damage and possible electrical arcing and flame.

PPTC are intended for protection against occasional over current or over temperature fault conditions and should not be used when repeated fault conditions or prolonged trip events are anticipated.

Device performance can be impacted negatively if devices are handled in a manner inconsistent with recommended electronic, thermal, and mechanical procedures for electronic components.

Use PPTC with a large inductance in circuit will generate a circuit voltage (L di/dt) above the rated voltage of the PPTC.

Avoid impact PPTC device its thermal expansion like placed under pressure or installed in limited space.

Contamination of the PPTC material with certain silicon based oils or some aggressive solvents can adversely impact the performance of the devices.PPTC SMD can be cleaned by standard methods.

· Requests that customers comply with our recommended solder pad layouts and recommended reflow profile. Improper board layouts or reflow profilecould negatively impact solderability performance of our devices.

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