



# SMD2920 Series

## Surface Mount PTC



Application:	All high-density boards
Product Features:	2920 Dimension, Surface mountable, Solid state, Faster time to trip than standard SMD devices.
Operation Current:	300mA~2.6A
Maximum Voltage:	6V~60V
Temperature Range:	-40°C to 85°C
Agency Recognition:	UL: SMD2920-030-60 to SMD2920-200-16 C-UL: SMD2920-030-60 to SMD2920-200-16 TÜV: SMD2920-030-60 to SMD2920-260-16

### Electrical Characteristics (23°C)

Part Number	Hold Current	Trip Current	Rated Voltage	Maximum Current	Typical Power	Max Time to Trip		Resistance Tolerance	
						Current	Time	RMIN	R1MAX
	IH, A	IT, A	VMAX, Vdc	IMAX, A	Pd, W			ohms	ohms
SMD2920-030-60	0.30	0.60	60	10	1.5	1.5	3.0	1.000	4.800
SMD2920-050-60	0.50	1.00	60	10	1.5	2.5	4.0	0.300	1.400
SMD2920-075-33	0.75	1.50	33	40	1.5	8.0	0.3	0.180	1.000
SMD2920-100-33	1.10	2.20	33	40	1.5	8.0	0.5	0.090	0.410
SMD2920-125-33	1.25	2.50	33	40	1.5	8.0	2.0	0.050	0.250
SMD2920-150-33	1.50	3.00	33	40	1.5	8.0	2.0	0.050	0.230
SMD2920-185-33	1.85	3.70	33	40	1.5	8.0	2.5	0.040	0.150
SMD2920-200-16	2.00	4.00	16	40	1.5	8.0	4.5	0.035	0.120
SMD2920-250-16	2.50	5.00	16	40	1.5	8.0	16.0	0.025	0.085
SMD2920-260-6	2.60	5.20	6	40	1.5	8.0	20.0	0.020	0.075

IH=Hold current-maximum current at which the device will not trip at 23°C still air.

IT=Trip current-minimum current at which the device will always trip at 23°C still air.

V MAX=Maximum voltage device can withstand without damage at its rated current (I max).

I MAX= Maximum fault current device can withstand without damage at rated voltage (V max).

Pd=Typical power dissipated from device when in the tripped state in 23°C still air environment.

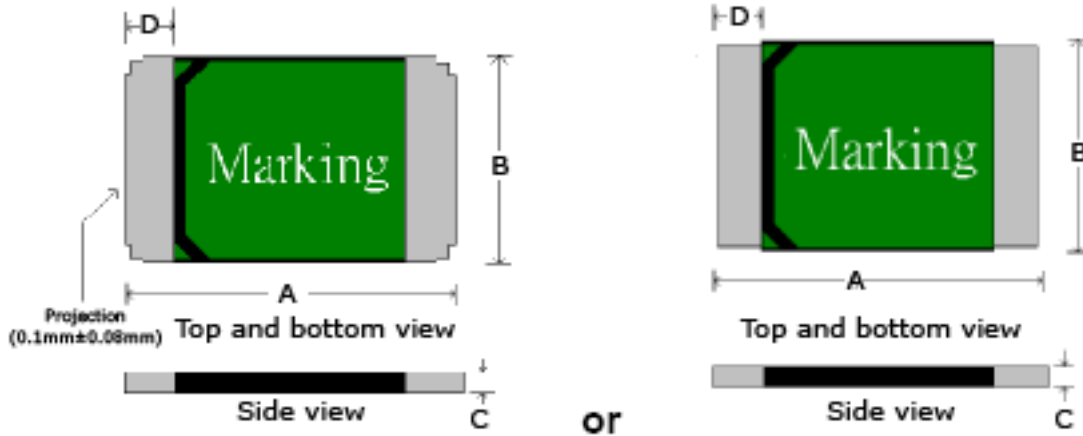
RMIN=Minimum device resistance at 23°C.

R1MAX=Maximum device resistance at 23°C, 1 hour after tripping.

Termination pad characteristics

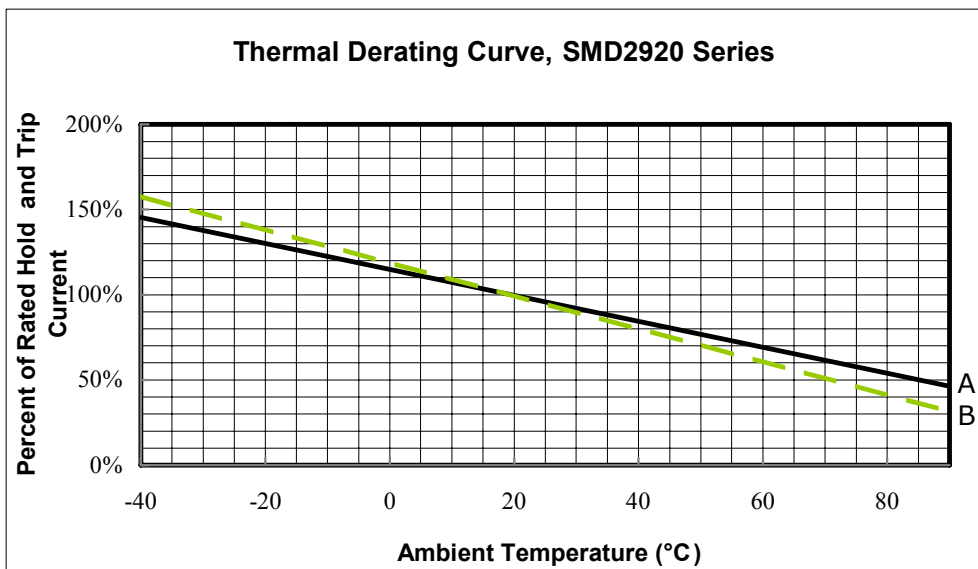
Termination pad materials: solder-plated copper

## SMD2920 Product Dimensions (Millimeters)



Part Number	A		B		C		D
	Min	Max	Min	Max	Min	Max	Min
SMD2920-030-60	6.73	7.98	4.80	5.44	0.60	1.15	0.35
SMD2920-050-60	6.73	7.98	4.80	5.44	0.60	1.15	0.35
SMD2920-075-33	6.73	7.98	4.80	5.44	0.60	1.15	0.35
SMD2920-100-33	6.73	7.98	4.80	5.44	0.40	1.00	0.35
SMD2920-125-33	6.73	7.98	4.80	5.44	0.40	0.90	0.35
SMD2920-150-33	6.73	7.98	4.80	5.44	0.40	0.90	0.35
SMD2920-185-33	6.73	7.98	4.80	5.44	0.30	0.90	0.35
SMD2920-200-16	6.73	7.98	4.80	5.44	0.30	0.90	0.35
SMD2920-250-16	6.73	7.98	4.80	5.44	0.30	0.90	0.35
SMD2910-260-6	6.73	7.98	4.80	5.44	0.30	0.90	0.35

## Thermal Derating Curve



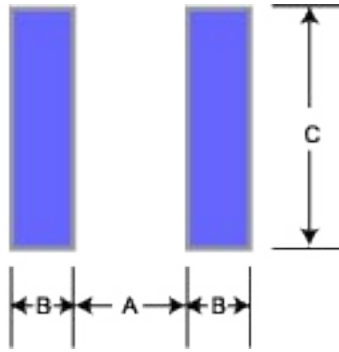
A = SMD2920-125 ~ SMD2920-260

B = SMD2920-030 ~ SMD2920-100



## Pad Layouts, Solder Reflow and Rework Recommendations

The dimension in the table below provide the recommended pad layout for each SMD2920 device



Pad dimensions (millimeters)			
Device	A	B	C
	Nominal	Nominal	Nominal
SMD2920-030-60	5.1	2.3	5.6
SMD2920-050-60	5.1	2.3	5.6
SMD2920-075-33	5.1	2.3	5.6
SMD2920-100-33	5.1	2.3	5.6
SMD2920-125-33	5.1	2.3	5.6
SMD2920-150-33	5.1	2.3	5.6
SMD2920-185-33	5.1	2.3	5.6
SMD2920-200-16	5.1	2.3	5.6
SMD2920-250-16	5.1	2.3	5.6
SMD2920-260-6	5.1	2.3	5.6

## Solder reflow

Due to "Lead Free" nature, up to 40 seconds Dwelling time for the soldering zone is strongly recommend .

1. Recommended reflow methods; IR, vapor phase oven, hot air oven.
2. The SMD2920 Series are suitable for use with wave-solder application methods.
3. Recommended maximum paste thickness is 0.25mm.
4. Devices can be cleaned using standard industry methods and solvents.

### CAUTION:

If reflow temperatures exceed the recommended Profile, devices may not meet the performance requirements.

### Rework:

Use standard industry practices.

