

Application:	All high-density boards
Product Features:	2920 Dimension, Surface mountable, Solid state, Faster time to trip than standard SMD devices.
Operation Current:	300mA~3.3A
Maximum Voltage:	6V~60VDC
Temperature Range:	-40°C to 85°C
Agency Recognition:	UL, C-UL, TÜV

## Electrical Characteristics (23°C)

Part Number	Hold Current IH, A	Trip Current IT, A	Rated Voltage VMAX,VDC	Maximum Current IMAX, A	Typical Power Pd, W	Max Time to Trip		Resistance Tolerance	
						Current	Time	RMIN	R1MAX
								ohms	ohms
SMD2920-030-60R	0.30	0.60	60	100	1.5	1.5	3.0	1.000	4.800
SMD2920-050-60R	0.50	1.00	60	100	1.5	2.5	4.0	0.300	1.400
SMD2920-075-33R	0.75	1.50	33	100	1.5	8.0	0.3	0.180	1.000
SMD2920-075-60R	0.75	1.50	60	100	1.5	8.0	0.3	0.180	1.000
SMD2920-110-33R	1.10	2.20	33	100	1.5	8.0	0.5	0.090	0.410
SMD2920-110-60R	1.10	2.20	60	100	1.5	8.0	0.5	0.090	0.410
SMD2920-125-33R	1.25	2.50	33	100	1.5	8.0	2.0	0.050	0.250
SMD2920-150-33R	1.50	3.00	33	100	1.5	8.0	2.0	0.050	0.230
SMD2920-185-33R	1.85	3.70	33	100	1.5	8.0	2.5	0.040	0.150
SMD2920-200-16R	2.00	4.00	16	100	1.5	8.0	4.5	0.035	0.120
SMD2920-200-24R	2.00	4.00	24	100	1.5	8.0	5.0	0.035	0.120
SMD2920-250-16R	2.50	5.00	16	100	1.5	8.0	16.0	0.025	0.085
SMD2920-260-6R	2.60	5.20	6	100	1.5	8.0	20.0	0.020	0.075
SMD2920-260-24R	2.60	5.20	24	100	1.5	8.0	20.0	0.020	0.075
SMD2920-300-6R	3.00	5.20	6	100	1.5	8.0	25.0	0.010	0.048
SMD2920-300-15R	3.00	5.20	15	100	1.5	8.0	20.0	0.010	0.048
SMD2920-330-24R	3.30	5.50	24	100	1.5	8.0	20.0	0.010	0.048

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.

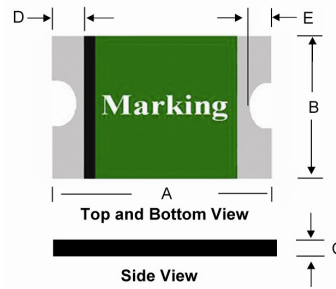
RMIN=Minimum device resistance at 23°C.

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

Termination pad characteristics

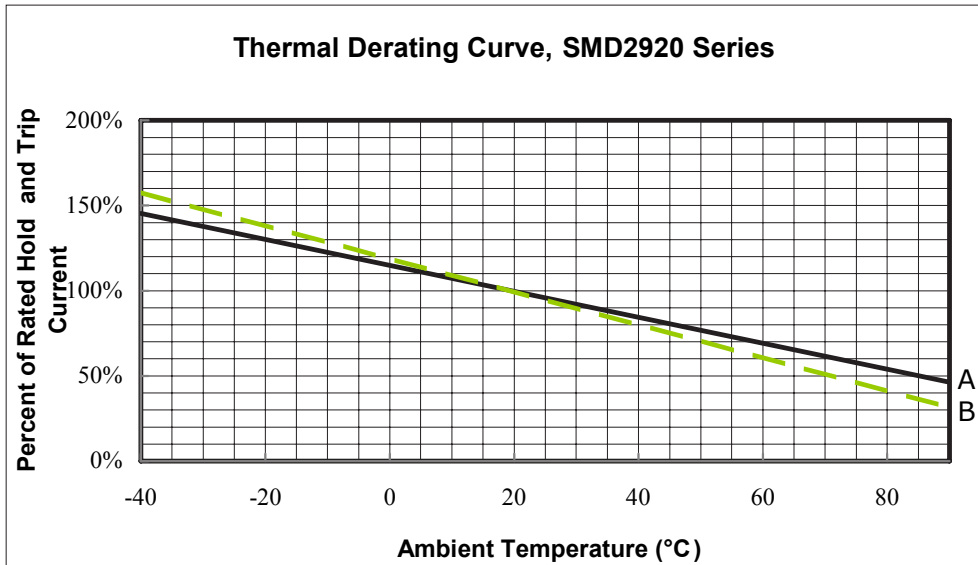
Termination pad materials: solder-plated copper

## SMD2920 Product Dimensions (Millimeters)



Part Number	A		B		C		D		E	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
SMD2920-030-60R	6.73	7.98	4.80	5.44	0.60	1.15	0.50	1.20	0.50	0.90
SMD2920-050-60R	6.73	7.98	4.80	5.44	0.60	1.15	0.50	1.20	0.50	0.90
SMD2920-075-33R	6.73	7.98	4.80	5.44	0.40	1.15	0.50	1.20	0.50	0.90
SMD2920-075-60R	6.73	7.98	4.80	5.44	0.60	1.15	0.50	1.20	0.50	0.90
SMD2920-110-33R	6.73	7.98	4.80	5.44	0.40	1.00	0.50	1.20	0.50	0.90
SMD2920-110-60R	6.73	7.98	4.80	5.44	0.40	1.70	0.50	1.20	0.50	0.90
SMD2920-125-33R	6.73	7.98	4.80	5.44	0.40	0.90	0.50	1.20	0.50	0.90
SMD2920-150-33R	6.73	7.98	4.80	5.44	0.40	0.90	0.50	1.20	0.50	0.90
SMD2920-185-33R	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
SMD2920-200-16R	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
SMD2920-200-24R	6.73	7.98	4.80	5.44	0.20	0.80	0.50	1.20	0.50	0.90
SMD2920-250-16R	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
SMD2920-260-6R	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
SMD2920-260-24R	6.73	7.98	4.80	5.44	0.65	1.15	0.50	1.20	0.50	0.90
SMD2920-300-6R	6.73	7.98	4.80	5.44	0.40	0.90	0.50	1.20	0.50	0.90
SMD2920-300-15R	6.73	7.98	4.80	5.44	0.40	1.15	0.50	1.20	0.50	0.90
SMD2920-330-24R	6.73	7.98	4.80	5.44	0.65	1.15	0.50	1.20	0.50	0.90

## Thermal Derating Curve



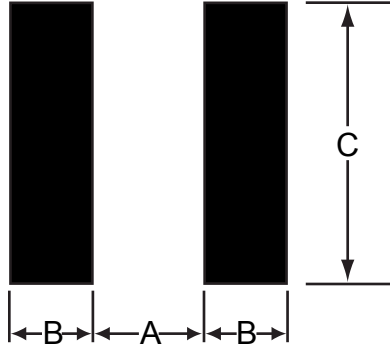
A = SMD2920-125 ~ SMD2920-330

B = SMD2920-030 ~ SMD2920-110



## Pad Layouts, Solder Reflow and Rework Recommendations

The dimension in the table below provide the recommended pad layout.



Pad dimensions (millimeters)			
Device	A	B	C
	Nominal	Nominal	Nominal
SMD2920 Series	5.10	2.30	5.60

Profile Feature	Pb-Free Assembly
<b>Average Ramp-Up Rate (T<sub>smax</sub> to T<sub>p</sub>)</b>	3°C / second max.
<b>Preheat:</b> Temperature Min (T <sub>smin</sub> ) Temperature Max (T <sub>smax</sub> ) Time (t <sub>smin</sub> to t <sub>smax</sub> )	150°C 200°C 60-180 seconds
<b>Time maintained above:</b> Temperature (T <sub>L</sub> ) Time (t <sub>L</sub> )	217°C 60-150 seconds
<b>Peak / Classification Temperature (T<sub>p</sub>):</b>	260°C
<b>Time within 5°C of actual peak:</b> Temperature (t <sub>p</sub> )	20-40 seconds
<b>Ramp-Down Rate:</b>	6°C / second max.
<b>Time 25°C to Peak Temperature:</b>	8 minutes max.

### SOLDER REFLOW

Due to "Lead Free" nature, Temperature and Dwelling Time for the soldering zone is higher than those for Regular. This may cause damage to other components

1. Recommended maximum paste thickness > 0.25mm.
2. Devices can be cleaned using standard methods and aqueous solvents.
3. Rework use standard industry practices.
4. Storage Environment: <30°C / 60%RH

### CAUTION:

1. If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.
2. Devices are not designed to be wave soldered to the bottom side of the board.

