

SMD2920



SMD Type, 6 V - 60 V

Standard
UL 1434 1st Edition
CSA C22.2 No. 0 CSA TIL No. CA-3A

Approvals
cULus Recognition
TÜV

Features

These devices offer a wide range of hold currents from 0.3 A to 3.0 A and voltages from 6 V to 60 V. The SMD2920 product line is suitable for high density circuit board applications in computers, telecommunications and general electronics. Suitable for reflow soldering

Specifications

Packaging
A Blister tape and reel Ø 178 mm

Materials
Terminals: TS: Solder-plated copper
TF: Lead free plating on request

Max. Device Surface Temperature in Tripped State
125 °C

Operating / Storage Temperature
-40 °C to +85 °C (consider derating)

Humidity Ageing
+85 °C, 85 % R.H., 1000 hours, ± 5 % typical resistance change

Vibration
MIL-STD-883C, Method 2007.1, Condition A, no change

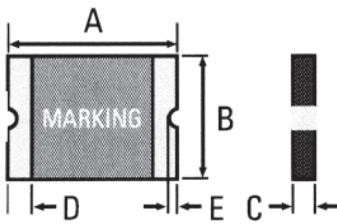
Thermal Shock
MIL-STD-202F, Method 107G
+85 °C to -40 °C 20 times, -30 % typical resistance change

Solderability
Meets EIA Specification RS186-9E, ANSI/J-STD-002, Category 3
Reflow only

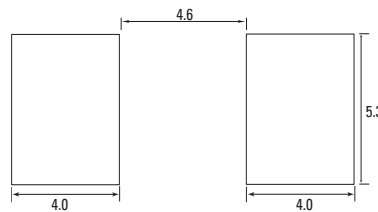
Solvent Resistance
MIL-STD-202, Method 215, no change

Marking
"P", Part Code

Dimensions (mm)



Solder pad Layout (mm)



Dimensions (mm)

Model	A		B		C		D		E		packaging quantity tape
	Min	Max	Min	Max	Min	Max	Min	Min	Max		
SMD2920P030TS/TF	6.73	7.98	4.80	5.44	0.75	1.25	0.30	0.25	2.00	1,500	
SMD2920P050TS/TF	6.73	7.98	4.80	5.44	0.75	1.25	0.30	0.25	2.00	1,500	
SMD2920P075TS/TF	6.73	7.98	4.80	5.44	0.75	1.25	0.30	0.25	2.00	1,500	
SMD2920P075TS/TF/60	6.73	7.98	4.80	5.44	1.20	2.00	0.30	0.25	2.00	t.b.d.	
SMD2920P100TS/TF	6.73	7.98	4.80	5.44	0.55	1.00	0.30	0.25	2.00	2,000	
SMD2920P125TS/TF	6.73	7.98	4.80	5.44	0.55	1.00	0.30	0.25	2.00	2,000	
SMD2920P150TS/TF	6.73	7.98	4.80	5.44	0.75	1.25	0.30	0.25	2.00	1,500	
SMD2920P185TS/TF	6.73	7.98	4.80	5.44	0.75	1.25	0.30	0.25	2.00	1,500	
SMD2920P200TS/TF	6.73	7.98	4.80	5.44	0.75	1.25	0.30	0.25	2.00	1,500	
SMD2920P200TS/TF/24	6.73	7.98	4.80	5.44	0.75	1.25	0.30	0.25	2.00	1,500	
SMD2920P250TS/TF	6.73	7.98	4.80	5.44	0.75	1.25	0.30	0.25	2.00	1,500	
SMD2920P260TS/TF	6.73	7.98	4.80	5.44	0.55	1.00	0.30	0.25	2.00	2,000	
SMD2920P300TS/TF	6.73	7.98	4.80	5.44	0.75	1.25	0.30	0.25	2.00	1,500	
SMD2920P300TS/TF/15	6.73	7.98	4.80	5.44	0.75	1.25	0.30	0.25	2.00	1,500	

Permissible continuous operating current is ≤ 100 % at ambient temperature of 20 °C (68 °F).

Model (A)	I _{hold} (A)	I _{Trip} (A)	V _{max. dc} (V)	I _{max.} (A)	max. time to trip (s @ A)	P _{d max.} (W)	Resistance			Approvals	
							R _{min.} (Ω)	R _{typ.} (Ω)	R _{max.} (Ω)	cULus	TÜV
SMD2920P030TS/TF	0.30	0.60	60	10	3.00 @ 1.50	1.5	1.200	3.000	4.800	•	•
SMD2920P050TS/TF	0.50	1.00	60	10	4.00 @ 2.50	1.5	0.350	0.870	1.400	•	•
SMD2920P075TS/TF	0.75	1.50	30	40	0.30 @ 8.00	1.5	0.350	0.670	1.000	•	•
SMD2920P075TS/TF/60	0.75	1.50	60	10	0.30 @ 8.00	1.5	0.300	t.b.d.	0.950	p	p
SMD2920P100TS/TF	1.10	2.20	33	40	0.50 @ 8.00	1.5	0.120	0.270	0.410	•	•
SMD2920P125TS/TF	1.25	2.50	15	40	2.00 @ 8.00	1.5	0.070	0.160	0.250	•	•
SMD2920P150TS/TF	1.50	3.00	33	40	2.00 @ 8.00	1.5	0.080	0.150	0.230	•	•
SMD2920P185TS/TF	1.85	3.70	33	40	2.50 @ 8.00	1.5	0.065	0.110	0.150	•	•
SMD2920P200TS/TF	2.00	4.00	15	40	5.00 @ 8.00	1.5	0.050	0.090	0.125	•	•
SMD2920P200TS/TF/24	2.00	4.00	24	40	5.00 @ 8.00	1.5	0.050	0.090	0.125	•	•
SMD2920P250TS/TF	2.50	5.00	15	40	10.00 @ 8.00	1.5	0.035	0.060	0.085	•	•
SMD2920P260TS/TF	2.60	5.20	6	40	10.00 @ 8.00	1.5	0.025	0.050	0.075	•	•
SMD2920P300TS/TF	3.00	6.00	6	40	20.00 @ 8.00	1.5	0.015	0.033	0.048	•	•
SMD2920P300TS/TF/15	3.00	6.00	15	40	20.00 @ 8.00	1.5	0.015	0.033	0.048	•	•

Please choose TS for SnPb and TF for Sn plating

NOTE:

- I_{hold} = Hold current: maximum current device will pass without tripping in 20 °C still air.
- I_{Trip} = Trip current: minimum current at which the device will trip in 20 °C still air.
- V_{max.} = Maximum voltage device can withstand without damage at rated current (I_{max.})
- I_{max.} = Maximum fault current device can withstand without damage at rated voltage (V_{max.})

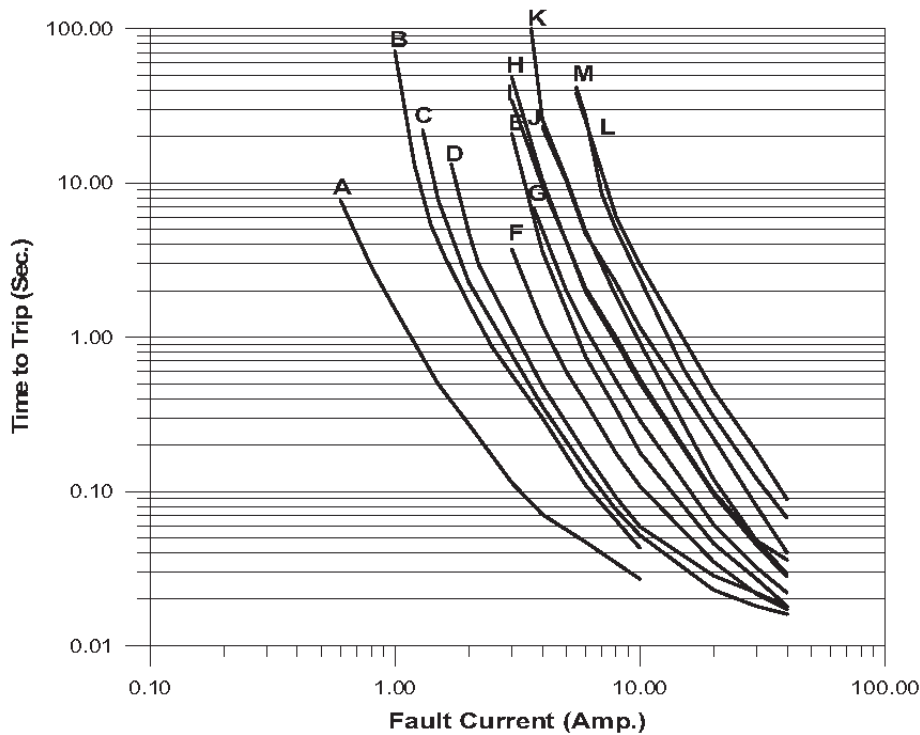
- P_d = Power dissipated from device when in the tripped state at 20 °C still air.
 - R_{min.} = Minimum resistance of device in initial (un-soldered) state.
 - R_{max.} = Maximum resistance of device at 20 °C measured one hour after tripping for 20 s.
- Caution: Operation beyond the specified rating may result in damage and possible arcing and flame. Specifications are subject to change without notice**

Order Information

Qty.	Order-Number	Model	Packaging
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t.b.d. = to be determined
p = pending

SMD2920



- A: SMD2920P030TS/TF
- B: SMD2920P050TS/TF
- C: SMD2920P075TS/TF
- D: SMD2920P075TS/TF/60
- E: SMD2920P100TS/TF
- F: SMD2920P150TS/TF
- G: SMD2920P185TS/TF
- H: SMD2920P200TS/TF
- I: SMD2920P200TS/TF/24
- J: SMD2920P250TS/TF
- K: SMD2920P260TS/TF
- L: SMD2920P300TS/TF
- M: SMD2920P300TS/TF/15

Thermal Derating Chart

Model	Ambient Operation Temperature - I_{hold} (A)								
	-40 °C	-20 °C	0 °C	23 °C	40 °C	50 °C	60 °C	70 °C	85 °C
SMD2920P030TS/TF	0.45	0.40	0.35	0.30	0.25	0.23	0.20	0.17	0.14
SMD2920P050TS/TF	0.76	0.67	0.59	0.50	0.42	0.38	0.33	0.29	0.23
SMD2920P075TS/TF	1.13	1.01	0.88	0.75	0.62	0.56	0.50	0.44	0.34
SMD2920P075TS/TF/60	t.b.d.	t.b.d.	t.b.d.	t.b.d.	t.b.d.	t.b.d.	t.b.d.	t.b.d.	t.b.d.
SMD2920P100TS/TF	1.66	1.47	1.29	1.10	0.91	0.83	0.73	0.64	0.50
SMD2920P125TS/TF	1.89	1.68	1.46	1.25	1.04	0.94	0.83	0.73	0.56
SMD2920P150TS/TF	2.27	2.01	1.76	1.50	1.25	1.13	1.00	0.87	0.74
SMD2920P185TS/TF	2.80	2.47	2.17	1.85	1.54	1.39	1.22	1.07	0.85
SMD2920P200TS/TF	3.02	2.68	2.34	2.00	1.66	1.50	1.32	1.16	0.90
SMD2920P200TS/TF/24	3.14	2.77	2.42	2.00	1.73	1.56	1.38	1.20	0.98
SMD2920P250TS/TF	3.78	3.35	2.93	2.50	2.08	1.88	1.65	1.45	1.13
SMD2920P260TS/TF	3.64	3.25	2.91	2.60	2.26	2.08	1.95	1.74	1.48
SMD2920P300TS/TF	4.53	4.02	3.51	3.00	2.52	2.26	1.99	1.75	1.34
SMD2920P300TS/TF/15	4.20	3.85	3.44	3.00	2.69	2.50	2.31	2.12	1.83