



**THE DATASHEET OF
SMD2920P185TFA**



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

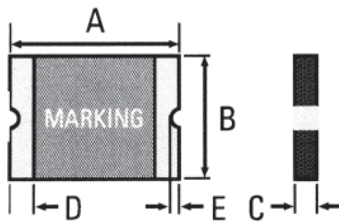
Thermal Shock
MIL-STD-202F, Method 107G
+85 °C to -40 °C 20 times, -30 % typical resistance change

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

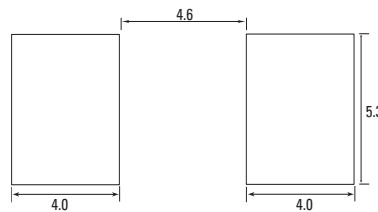
Solvent Resistance
MIL-STD-202, Method 215, no change

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.})

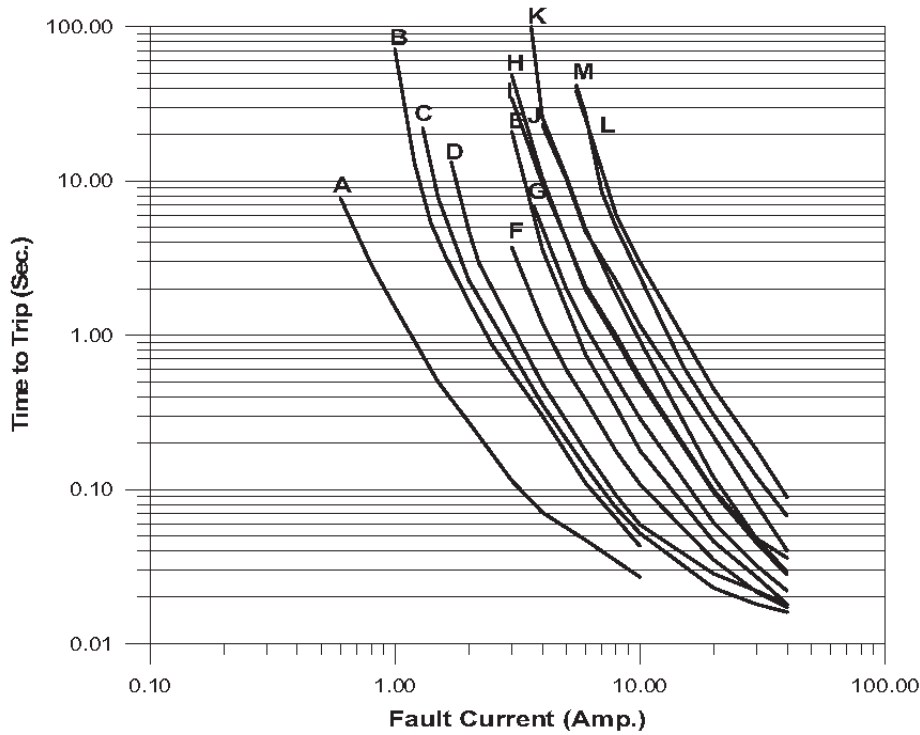
- P_d = Power dissipated from device when in the tripped state at 20 °C still air.
 - R_{min.} = Minimum resistance of device in initial (un-soldered) state.
 - R_{max.} = Maximum resistance of device at 20 °C measured one hour after tripping for 20 s.
- Caution: Operation beyond the specified rating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

Order Information

| Qty. | Order- Number | Model | Packaging |
|------|------------------|-------|-----------|
|------|------------------|-------|-----------|

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 |

Looking for pricing, stock, or lifecycle information?

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- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management