

# SMD2016



## SMD Type, 6 V - 60 V

**Standard**  
UL 1434 1<sup>st</sup> 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 2.0 A and voltages from 6 V to 60 V. The SMD2016 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: TF: Lead free plating

**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

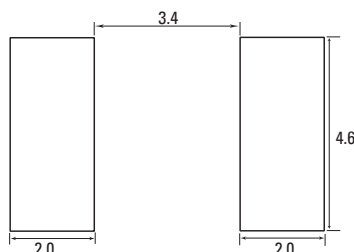
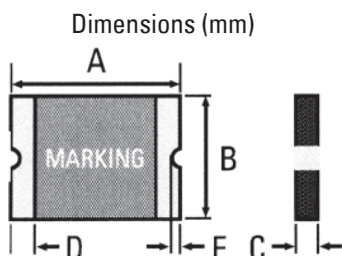
**Thermal Shock**  
MIL-STD-202F, Method 107G  
+85 °C to -40 °C 20 times, -30 % typical resistance change

**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

Solder pad Layout (mm)



Dimensions (mm)										
Model	A		B		C		D	E		packaging quantity tape
	Min	Max	Min	Max	Min	Max		Min	Max	
SMD2016P030TF	4.72	5.44	3.70	4.43	0.75	1.25	0.30	0.25	0.65	1,500
SMD2016P050TF	4.72	5.44	3.70	4.43	1.20	2.00	0.30	0.25	0.65	1,500
SMD2016P100TF	4.72	5.44	3.70	4.43	0.50	0.75	0.30	0.25	0.65	2,000
SMD2016P100TF/33	4.72	5.44	3.70	4.43	0.75	1.25	0.30	0.25	0.65	1,500
SMD2016P150TF	4.72	5.44	3.70	4.43	0.75	1.55	0.30	0.25	0.65	1,500
SMD2016P200TF	4.72	5.44	3.70	4.43	0.50	0.75	0.30	0.25	0.65	2,000

Permissible continuous operating current is ≤ 100 % at ambient temperature of 20 °C (68 °F).											
Model	I <sub>hold</sub> (A)	I <sub>Trip</sub> (A)	V <sub>max. dc</sub> (V)	I <sub>max.</sub> (A)	max. time to trip (s @ A)	P <sub>d max.</sub> (W)	Resistance			Approvals	
							R <sub>min.</sub> (Ω)	R <sub>typ.</sub> (Ω)	R <sub>I max.</sub> (Ω)	cURus	TÜV
SMD2016P030TF	0.30	0.60	60	20	3.00 @ 1.50	1.4	0.500	1.400	2.300	•	•
SMD2016P050TF	0.55	1.10	60	20	5.00 @ 2.50	1.4	0.200	0.700	1.000	•	•
SMD2016P100TF	1.10	2.20	15	40	0.50 @ 8.00	1.4	0.100	0.250	0.400	•	•
SMD2016P100TF/33	1.10	2.20	33	40	0.50 @ 8.00	1.4	0.100	0.250	0.400	•	•
SMD2016P150TF	1.50	3.00	15	40	1.00 @ 8.00	1.4	0.070	0.130	0.180	•	•
SMD2016P200TF	2.00	4.20	6	40	3.00 @ 8.00	1.4	0.048	0.070	0.100	•	•

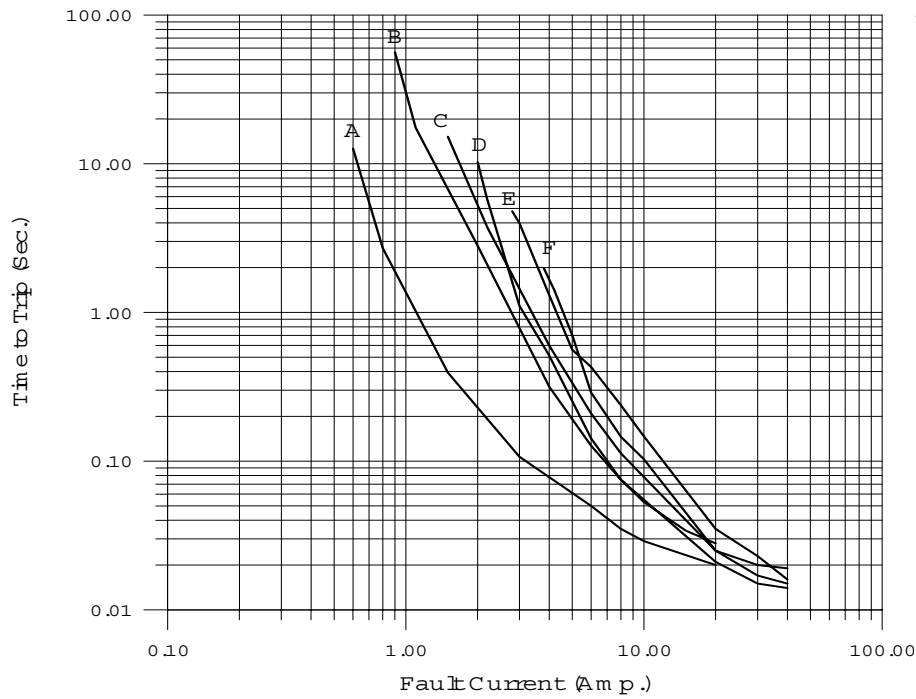
NOTE:  
 I<sub>hold</sub> = Hold current: maximum current device will pass without tripping in 20 °C still air.  
 I<sub>Trip</sub> = Trip current: minimum current at which the device will trip in 20 °C still air.  
 V<sub>max.</sub> = Maximum voltage device can withstand without damage at rated current (I<sub>max.</sub>)  
 I<sub>max.</sub> = Maximum fault current device can withstand without damage at rated voltage (V<sub>max.</sub>)

P<sub>d</sub> = Power dissipated from device when in the tripped state at 20 °C still air.  
 R<sub>min.</sub> = Minimum resistance of device in initial (un-soldered) state.  
 R<sub>I max.</sub> = 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

## SMD2016



- A: SMD2016P030TF
- B: SMD2016P050TF
- C: SMD2016P100TF
- D: SMD2016P100TF/33
- E: SMD2016P150TF
- F: SMD2016P200TF

### 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
SMD2016P030TF	0.45	0.40	0.35	0.30	0.25	0.23	0.20	0.18	0.14
SMD2016P050TF	0.93	0.80	0.65	0.50	0.38	0.32	0.25	0.19	0.09
SMD2016P100TF	1.66	1.47	1.29	1.10	0.91	0.83	0.73	0.64	0.50
SMD2016P100TF/33	1.66	1.47	1.29	1.10	0.91	0.83	0.73	0.64	0.50
SMD2016P150TF	2.26	2.00	1.76	1.50	1.24	1.13	1.00	0.87	0.68
SMD2016P200TF	2.80	2.50	2.19	2.00	1.84	1.74	1.50	1.34	1.14