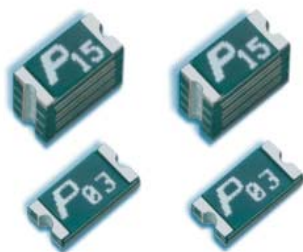


# SMD1206

This product is not recommended for new designs. Please refer to Littelfuse No. 1206L.



## SMD Type, 6 V - 30 V

### Standard

UL 1434 1<sup>st</sup> Edition  
CSA C22.2 No. 0 CSA TIL No. CA-3A

### Approvals

cULus Recognition  
TÜV

### Features

This product line enables installation in limited space applications. These devices offer wide range in hold currents from 0.125 A to 1.50 A and voltages from 6 V to 30 V. The SMD1206 product line is suitable for high density circuit board applications in computers, cellular phone and general electronics.  
Suitable for reflow soldering

## Specifications

### Packaging

A Blister tape and reel Ø 178 mm

### Materials

Terminals: Solder-plated copper  
TS: Solder Material: 63/37 SnPb  
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

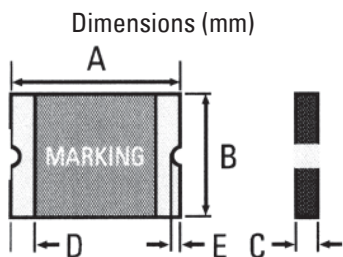
Meets EIA Specification RS186-9E,  
ANSI/J-STD-002, Category 3  
Reflow only

### Solvent Resistance

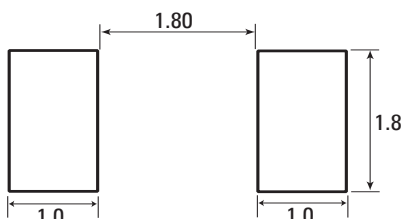
MIL-STD-202, Method 215, no change

### Marking

"P", Part Code



Solder pad Layout (mm)



\* only type "TF"

Dimensions (mm)										
Model	A		B		C		D	E		packaging quantity tape
	Min	Max	Min	Max	Min	Max		Min	Max	
SMD1206P012TS/TF	3.00	3.50	1.50	1.80	0.65	1.45	0.10	0.20	0.45	3.000
SMD1206P016TS/TF	3.00	3.50	1.50	1.80	0.65	1.45	0.10	0.20	0.45	3.000
SMD1206P020TS/TF	3.00	3.50	1.50	1.80	0.50	1.00	0.10	0.20	0.45	4.000
SMD1206P025TS/TF	3.00	3.50	1.50	1.80	0.50	1.00	0.10	0.20	0.45	4.000
SMD1206P035TS/TF	3.00	3.50	1.50	1.80	0.45	0.75	0.10	0.20	0.45	4.000
SMD1206P035TS/TF/15	3.00	3.50	1.50	1.80	0.45	0.75	0.10	0.20	0.45	4.000
SMD1206P050TS/TF	3.00	3.50	1.50	1.80	0.45	0.75	0.10	0.20	0.45	4.000
SMD1206P075TS/TF	3.00	3.50	1.50	1.80	0.45	1.25	0.10	0.20	0.45	3.000
SMD1206P100TS/TF	3.00	3.50	1.50	1.80	0.75	1.25	0.10	0.20	0.45	3.000
SMD1206P150TS/TF	3.00	3.50	1.50	1.80	1.00	1.60	0.10	0.20	0.45	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>m.ax.dc</sub> (V)	I <sub>m.ax.</sub> (A)	max. time to trip (s @ A)	P <sub>d max.</sub> (W)	Resistance			Approvals cULus TÜV
							R <sub>min.</sub> ( )	R <sub>typ.</sub> ( )	R <sub>l.max.</sub> ( )	
SMD1206P012TS/TF	0.125	0.29	30	40	0.20 @ 1.00	0.6	1.500	3.600	6.000	• •
SMD1206P016TS/TF	0.160	0.37	30	40	0.30 @ 1.00	0.6	1.200	2.800	4.500	• •
SMD1206P020TS/TF	0.200	0.40	16	40	0.05 @ 8.00	0.6	0.600	1.550	2.500	• •
SMD1206P025TS/TF	0.250	0.50	16	40	0.08 @ 8.00	0.6	0.550	1.400	2.300	• •
SMD1206P035TS/TF	0.350	0.75	6	40	0.10 @ 8.00	0.6	0.300	0.750	1.200	• •
SMD1206P035TS/TF/15	0.350	0.75	15	40	0.10 @ 8.00	0.6	0.300	0.750	1.200	• •
SMD1206P050TS/TF	0.500	1.00	6	40	0.10 @ 8.00	0.6	0.150	0.400	0.700	• •
SMD1206P075TS/TF	0.750	1.50	6	40	0.20 @ 8.00	0.6	0.090	0.200	0.290	• •
SMD1206P100TS/TF	1.000	1.80	6	40	0.30 @ 8.00	0.6	0.055	0.110	0.210	• •
SMD1206P150TS/TF	1.500	3.00	6	40	1.00 @ 8.00	0.8	0.040	0.080	0.120	• •

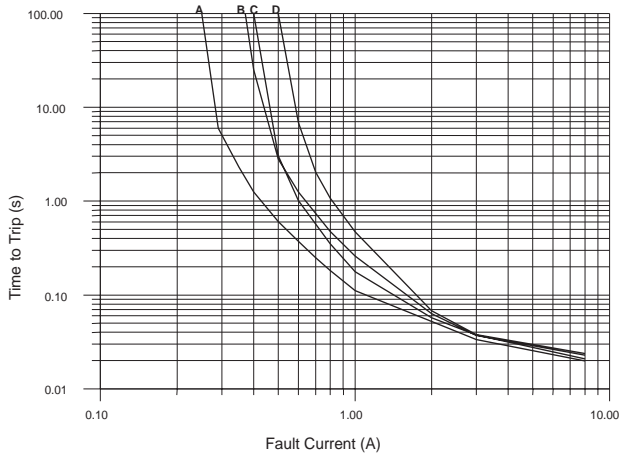
Please choose TS for SnPb and TF for Sn plating

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>m.ax.</sub> = Maximum voltage device can withstand without damage at rated current (I<sub>m.ax.</sub>)  
I<sub>m.ax.</sub> = Maximum fault current device can withstand without damage at rated voltage (V<sub>m.ax.</sub>)

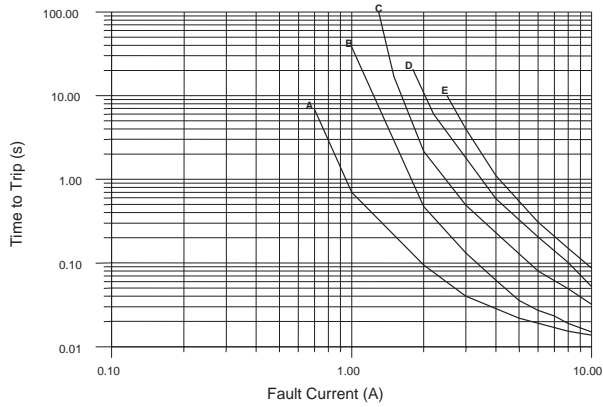
P<sub>d</sub> = Power dissipated from device when in the tripped state at 20 °C still air.  
R<sub>min.</sub> = Minimum resistance of device in initial (un-soldered) state.  
R<sub>l.max.</sub> = Maximum resistance of device at 20 °C measured one hour after tripping for 20 s.  
**Caution: Operation beyond 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

## SMD1206



A: SMD1206P012TS/TF  
 B: SMD1206P016TS/TF  
 C: SMD1206P020TS/TF  
 D: SMD1206P025TS/TF



A: SMD1206P035TS/TF  
 B: SMD1206P050TS/TF  
 C: SMD1206P075TS/TF  
 D: SMD1206P100TS/TF  
 E: SMD1206P150TS/TF

### 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
SMD1206P012TS/TF	0.18	0.16	0.14	0.125	0.10	0.09	0.08	0.07	0.05
SMD1206P016TS/TF	0.22	0.20	0.18	0.16	0.14	0.12	0.10	0.09	0.08
SMD1206P020TS/TF	0.28	0.25	0.23	0.20	0.17	0.15	0.14	0.12	0.09
SMD1206P025TS/TF	0.37	0.33	0.29	0.25	0.22	0.20	0.17	0.15	0.12
SMD1206P035TS/TF	0.50	0.45	0.40	0.35	0.30	0.27	0.24	0.21	0.15
SMD1206P035TS/TF/15	0.50	0.65	0.40	0.35	0.30	0.27	0.24	0.21	0.15
SMD1206P050TS/TF	0.71	0.64	0.57	0.50	0.42	0.39	0.35	0.31	0.25
SMD1206P075TS/TF	1.14	1.01	0.88	0.75	0.65	0.59	0.54	0.49	0.41
SMD1206P100TS/TF	1.45	1.31	1.15	1.00	0.84	0.77	0.69	0.61	0.48
SMD1206P150TS/TF	2.18	1.94	1.72	1.50	1.28	1.17	1.06	0.96	0.77