

## SMD1812 HF Series Surface Mount PTC Devices

### Description

The 1812 series provides surface mount resettable overcurrent protection with holding current from 0.1A to 3.0A. This series offers complete portfolio in terms of holding current and working voltage, and is suitable for wide range of applications.

### Features





- RoHS compliant and lead-free
- Halogen-free
- Compact design saves board space
- Low profile
- Fast response to fault current
- Compatible with high temperature solders

### Applications



- USB hubs, ports and peripherals
- Set-top-box and HDMI
- Game console port protection
- Motherboard USB & IEEE 1394 protection
- Optical disk drives
- General electronics



### Agency Approval and Environmental Compliance

Agency	File Number	Regulation	Standard
	E201431		2011/65/EU
	R50099121		IEC 61249-2-21:2003

### Electrical Characteristics

Part Number	I <sub>hold</sub> (A)	I <sub>trip</sub> (A)	V <sub>max</sub> (Vdc)	I <sub>max</sub> (A)	P <sub>d typ</sub> (W)	Maximum Time To Trip		Resistance		Agency Approval	
						Current (A)	Time (Sec.)	R <sub>min</sub> (Ω)	R <sub>1max</sub> (Ω)		
SMD1812P010TF	0.10	0.30	30	100	0.8	0.50	1.50	1.600	15.000	✓	✓
SMD1812P010TF/60	0.10	0.30	60	10	0.8	0.50	1.50	1.600	15.000	✓	✓
SMD1812P014TF	0.14	0.34	60	10	0.8	1.50	0.15	1.500	6.000	✓	✓
SMD1812P020TF	0.20	0.40	30	100	0.8	8.00	0.02	0.800	5.000	✓	✓
SMD1812P020TF-J	0.20	0.40	60	40	0.8	1.00	2.00	1.400	4.400	✓	✓
SMD1812P035TF/30	0.35	0.75	30	40	0.8	8.00	0.15	0.400	1.700	✓	✓
SMD1812P035TF/60	0.35	0.70	60	10	1.0	8.00	0.15	0.400	1.700	✓	✓
SMD1812P050TF	0.50	1.00	15	100	0.8	8.00	0.15	0.150	1.000	✓	✓
SMD1812P050TF/30	0.50	1.00	30	100	0.8	8.00	0.15	0.150	1.000	✓	✓
SMD1812P050TF/60	0.50	1.00	60	10	1.5	8.00	0.15	0.150	1.000	✓	✓
SMD1812P075TF	0.75	1.50	13.2	100	0.8	8.00	0.20	0.100	0.450	✓	✓
SMD1812P075TF/24	0.75	1.50	24	100	0.8	8.00	0.20	0.110	0.290	✓	✓
SMD1812P075TF/33	0.75	1.50	33	20	0.8	8.00	0.20	0.110	0.400	✓	✓
SMD1812P110TF	1.10	2.20	8	100	0.8	8.00	0.30	0.040	0.210	✓	✓
SMD1812P110TF/16	1.10	1.95	16	100	0.8	8.00	0.30	0.060	0.180	✓	✓
SMD1812P110TF/24	1.10	1.95	24	20	0.8	8.00	0.50	0.060	0.200	✓	✓
SMD1812P110TF/33	1.10	1.95	33	20	0.8	8.00	0.50	0.060	0.200	✓	✓
SMD1812P125TF/16	1.25	2.50	16	100	0.8	8.00	0.40	0.050	0.140	✓	✓
SMD1812P150TF/8	1.50	3.00	8	100	0.8	8.00	0.30	0.040	0.110	✓	✓