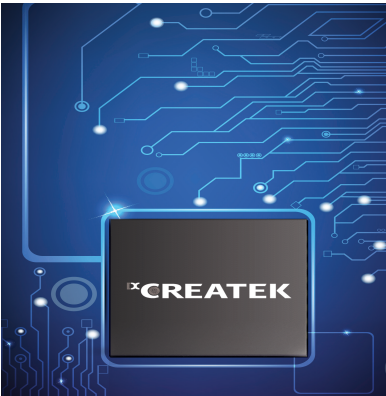




Expertise Applied | Answers Delivered



Polyswitch  
Resettable PTC  
SOLUTIONS



## Polyswitch Resettable PTC Selection Guide

# Markets and Applications

Createk Microelectronics works closely with the world's leading OEM design teams to provide innovative solutions ideal for today's application challenges.

## Communications



- Power over Ethernet (PoE)
- I/O interface
- Audio amp
- Data/User interface
- Micro controller protection

## Consumer



- Data/User interface
- DC-DC converter
- Audio processing
- Battery charging and control
- High voltage power supply
- Power management

## Industrial



- Power Factor Correction (PFC)
- Motor control
- Rectification
- Filter/Protection
- I/O interface
- DC-DC converter
- DC-AC inverter
- Battery and charging circuit

# About CREATEK

CREATEK Microelectronics a leading manufacturer and supplier of electronic components, Its products: circuit protection, magnetic components, power semiconductors, Headquartered in China, R&D center in San Francisco, the sales center in North American, and sales office in Shenzhen, Shanghai, Suzhou, Taiwan, India, Singapore.

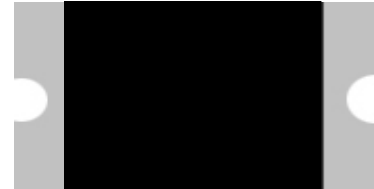
CREATEK Microelectronics serves a broad range of markets, including automotive, industrial, consumer, communications, non-critical life support medical, audio and various other market segments.

CREATEK Microelectronics team with rich experience on Power semiconductor's researching and producing in domestic and abroad, the founder have be experienced in achieving mass production and sales at first in Chinese IGBT chip. The company owns international advanced technical of design and process in Planar Transformer, IGBT, MOSFET, FRD, TVS, PTC, TSS, SBD etc,and other power semiconductors, also built reliable laboratory which used for power semiconductor's testing and applications .

## Polyswitch Resettable PTC in 0603

### Features

- Surface Mount Devices
- Standard 0603mils footprint
- Surface mount packaging for automated assembly
- Compatible with Pb and Pb-free solder reflow profiles.



### Applications

- Mobile phones- Battery and port protection
- PC motherboards – Plug and Play protection
- PDAs/Digital cameras
- USB port protection
- HDMI source protection
- Game console port protection

### Electrical Characteristics

Part Number	Marking	$V_{max}$	$I_{max}$	$I_{hold}$	$I_{trip}$	$P_d$	Maximum Time To Trip		$R_{imin}$	$R_{1max}$
		(Vdc)	(A)	(A)	(A)		Current(A)	Time(Sec)		
SMD0603C010SF15V	1	15	40	0.1	0.3	0.5	0.5	1	0.9	6
SMD0603C020SF9V	2	9	40	0.2	0.5	0.5	1	0.6	0.55	3.5
SMD0603C025SF9V	2	9	40	0.25	0.55	0.5	8	0.08	0.5	3
SMD0603C035SF6V	3	6	40	0.35	0.75	0.5	8	0.1	0.2	1.4
SMD0603C050SF6V	5	6	40	0.5	1	0.5	8	0.1	0.1	0.8
SMD0603C075SF6V	7	6	40	0.75	1.4	0.5	8	0.1	0.06	0.45
SMD0603C100SF6V	0	6	40	1	2	0.5	8	0.1	0.04	0.3

$I_H$ =Hold current: maximum current at which the device will not trip at 25°C still air.

$I_T$ =Trip current: minimum current at which the device will always trip at 25°C still air.

$V_{max}$ =Maximum voltage device can withstand without damage at rated current.

$I_{max}$ =Maximum fault current device can withstand without damage at rated voltage.

$P_d$ =Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

$R_{i min}$ =Minimum device resistance at 25°C prior to tripping.

$R_{max}$ =Maximum resistance of device when measured one hour post trip at 25°C.



## Test Procedures And Requirements

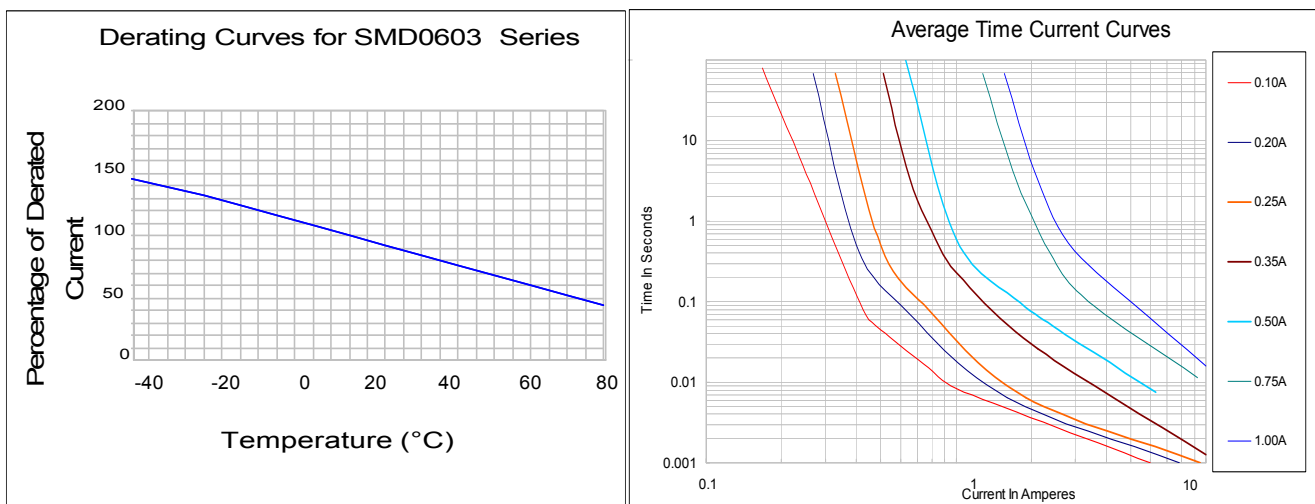
Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ 25°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	Specified current, $V_{max}$ , 25°C	$T \leq$ maximum Time to Trip
Hold Current	30min, at $I_H$	No trip
Trip Cycle Life	$V_{max}$ , $I_{max}$ , 100cycles	No arcing or burning
Trip Endurance	$V_{max}$ , 24hours	No arcing or burning

## Thermal Derating Chart

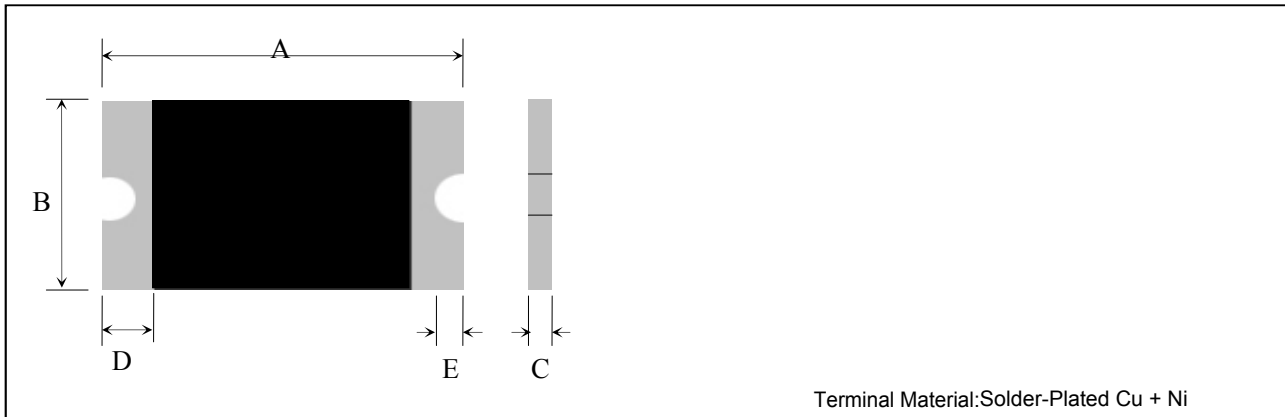
Recommended Hold Current (A) at Ambient Temperature (°C)

Part Number	Ambient Operation Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SMD0603C010SF15V	0.13	0.12	0.11	0.1	0.08	0.07	0.06	0.05	0.03
SMD0603C020SF9V	0.27	0.25	0.23	0.2	0.17	0.14	0.12	0.1	0.07
SMD0603C025SF9V	0.32	0.29	0.27	0.25	0.21	0.18	0.16	0.05	0.03
SMD0603C035SF6V	0.47	0.41	0.38	0.35	0.29	0.26	0.24	0.2	0.14
SMD0603C050SF6V	0.67	0.59	0.54	0.5	0.41	0.37	0.34	0.29	0.2
SMD0603C075SF6V	0.98	0.85	0.81	0.75	0.6	0.54	0.44	0.4	0.31
SMD0603C100SF6V	1.3	1.12	1.08	1	0.8	0.72	0.58	0.53	0.42

## Typical Characteristics



## Product Dimension



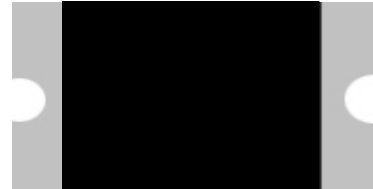
Part Number	A		B		C		D	E
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Min.
SMD0603C010SF15V	1.45	1.85	0.65	1.05	0.4	1	0.15	0.1
SMD0603C020SF9V	1.45	1.85	0.65	1.05	0.4	1	0.15	0.1
SMD0603C025SF9V	1.45	1.85	0.65	1.05	0.4	1	0.15	0.1
SMD0603C035SF6V	1.45	1.85	0.65	1.05	0.4	1	0.15	0.1
SMD0603C050SF6V	1.45	1.85	0.65	1.05	0.5	1.1	0.15	0.1
SMD0603C075SF6V	1.45	1.85	0.65	1.05	0.5	1.1	0.15	0.1
SMD0603C100SF6V	1.45	1.85	0.65	1.05	0.5	1.1	0.15	0.1

Order code	Package	Packaging option	Base quantity	Packaging specification
SMD0603 Series	0603	Tape&Reel	5000pcs / Reel	EIA STD RS-481

## Polyswitch Resettable PTC in 0805

### Features

- Surface Mount Devices
- Standard 0805mils footprint
- Surface mount packaging for automated assembly
- Compatible with Pb and Pb-free solder reflow profiles.



### Applications

- Mobile phones- Battery and port protection
- PC motherboards – Plug and Play protection
- PDAs/Digital cameras
- USB port protection
- HDMI source protection
- Game console port protection

### Electrical Characteristics

Part Number	Marking	$V_{max}$	$I_{max}$	$I_{hold}$	$I_{trip}$	$P_d$	Maximum Time To Trip		$R_{imin}$	$R_{1max}$
		(Vdc)	(A)	(A)	(A)	(W)	Current(A)	Time(Sec)	( $\Omega$ )	( $\Omega$ )
SMD0805C010SF15V	1	15	100	0.1	0.3	0.5	0.5	1.5	1	6
SMD0805C020SF9V	2	9	100	0.2	0.5	0.5	8	0.02	0.65	3.5
SMD0805C035SF6V	3	6	100	0.35	0.75	0.5	8	0.1	0.25	1.2
SMD0805C050SF6V	5	6	100	0.5	1	0.5	8	0.1	0.15	0.85
SMD0805C075SF6V	7	6	40	0.75	1.5	0.6	8	0.2	0.09	0.385
SMD0805C100SF6V	0	6	100	1	1.95	0.6	8	0.3	0.06	0.23
SMD0805C110SF6V	0	6	100	1.1	2.2	0.6	8	0.3	0.06	0.21
SMD0805C125SF6V	12	6	100	1.25	2.5	1.5	8	0.6	0.03	0.14

$I_H$ =Hold current: maximum current at which the device will not trip at 25°C still air.

$I_T$ =Trip current: minimum current at which the device will always trip at 25°C still air.

$V_{max}$ =Maximum voltage device can withstand without damage at rated current.

$I_{max}$ =Maximum fault current device can withstand without damage at rated voltage.

$P_d$ =Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

$R_{i min}$ =Minimum device resistance at 25°C prior to tripping.

$R_{max}$ =Maximum resistance of device when measured one hour post trip at 25°C.

## Test Procedures And Requirements

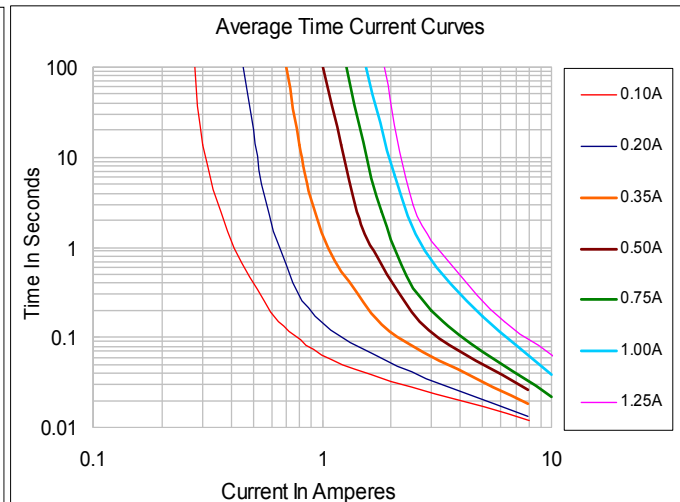
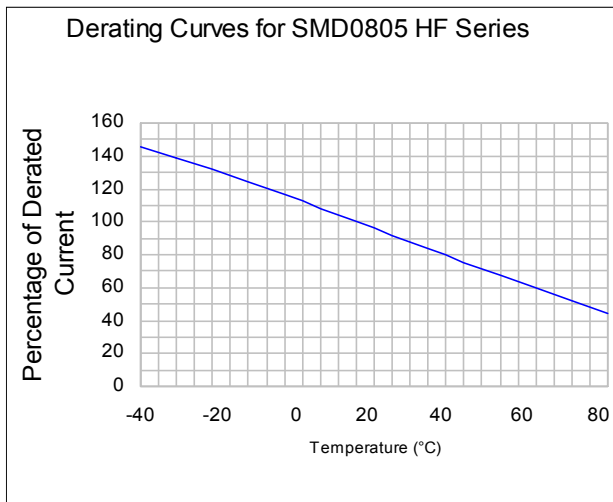
Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ 25°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	Specified current, $V_{max}$ , 25°C	$T \leq$ maximum Time to Trip
Hold Current	30min, at $I_H$	No trip
Trip Cycle Life	$V_{max}$ , $I_{max}$ , 100cycles	No arcing or burning
Trip Endurance	$V_{max}$ , 24hours	No arcing or burning

## Thermal Derating Chart

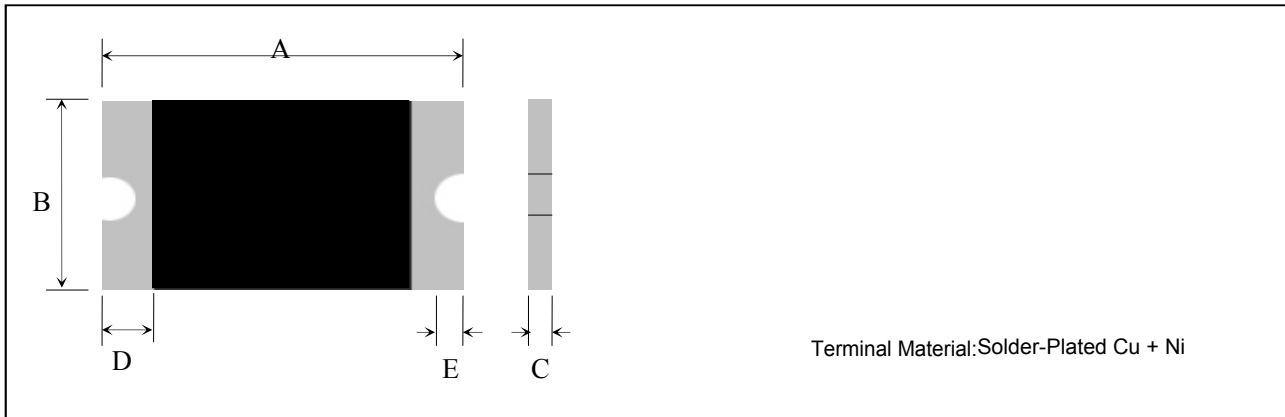
Recommended Hold Current (A) at Ambient Temperature (°C)

Part Number	Ambient Operation Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SMD0805C010SF15V	0.14	0.12	0.11	0.1	0.08	0.07	0.06	0.05	0.03
SMD0805C020SF9V	0.28	0.25	0.23	0.2	0.17	0.14	0.12	0.1	0.07
SMD0805C035SF6V	0.47	0.44	0.39	0.35	0.3	0.27	0.24	0.2	0.14
SMD0805C050SF6V	0.68	0.62	0.55	0.5	0.4	0.37	0.33	0.29	0.23
SMD0805C075SF6V	1	0.9	0.79	0.75	0.63	0.57	0.53	0.41	0.34
SMD0805C100SF6V	1.35	1.25	1.15	1	0.82	0.74	0.65	0.55	0.42
SMD0805C110SF6V	1.45	1.35	1.2	1.1	0.92	0.84	0.75	0.65	0.52
SMD0805C125SF6V	1.65	1.53	1.36	1.25	1.05	0.95	0.85	0.74	0.59

## Typical Characteristics



## Product Dimension



Part Number	A		B		C		D	E
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Min.
SMD0805C010SF15V	2.00	2.20	1.20	1.50	0.50	1.00	0.20	0.10
SMD0805C020SF9V	2.00	2.20	1.20	1.50	0.45	1.00	0.20	0.10
SMD0805C035SF6V	2.00	2.20	1.20	1.50	0.45	1.00	0.20	0.10
SMD0805C050SF6V	2.00	2.20	1.20	1.50	0.30	0.60	0.20	0.10
SMD0805C075SF6V	2.00	2.20	1.20	1.50	0.40	1.00	0.20	0.10
SMD0805C100SF6V	2.00	2.20	1.20	1.50	0.50	1.10	0.20	0.10
SMD0805C110SF6V	2.00	2.20	1.20	1.50	0.50	1.20	0.20	0.10
SMD0805C125SF6V	2.00	2.20	1.20	1.50	0.50	1.20	0.20	0.10

## Ordering information

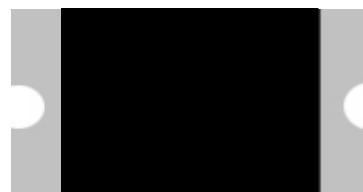
Order code	Package	Packaging option	Base quantity	Packaging specification
SMD0805C010.020.035.050.SF	0805	Tape&Reel	5000pcs / Reel	EIA STD RS-481
SMD0805C075.100.110.125.SF	0805	Tape&Reel	4000pcs / Reel	EIA STD RS-481



## Polyswitch Resettable PTC in 1206

### Features

- Surface Mount Devices
- Standard 3216mm(1206mils) footprint
- Surface mount packaging for automated assembly
- Compatible with Pb and Pb-free solder reflow profiles.



### Applications

- Mobile phones- Battery and port protection
- PC motherboards – Plug and Play protection
- PDAs/Digital cameras
- USB port protection
- HDMI source protection
- Game console port protection

### Electrical Characteristics

Part Number	Marking	$V_{max}$	$I_{max}$	$I_{hold}$	$I_{trip}$	$P_d$	Max Time To Trip		$R_{i_{min}}$	$R_{1max}$
		(V dc)	(A)	(A)	(A)		(W)	(A)	(Sec)	(W)
SMD1206C005SF60V	RA	60	100	0.05	0.15	0.4	0.25	1.5	3.6	50
SMD1206C010SF60V	R1	60	100	0.1	0.25	0.4	0.5	1	1.6	15
SMD1206C012SF60V	R1	60	100	0.12	0.29	0.4	0.5	1	1.6	15
SMD1206C020SF24V	R2	24	100	0.2	0.46	0.6	8	0.08	0.35	2.7
SMD1206C025SF16V	R2	16	100	0.25	0.5	0.6	8	0.08	0.35	2.5
SMD1206C035SF6V	R3	6	100	0.35	0.75	0.6	8	0.1	0.25	1.3
SMD1206C035SF30V	R3	30	100	0.35	0.75	0.6	8	0.1	0.25	1.3
SMD1206C050SF6V	R5	6	100	0.5	1	0.6	8	0.1	0.15	0.7
SMD1206C050SF13.2V	R5	13.2	100	0.5	1	0.6	8	0.1	0.15	0.7
SMD1206C050SF16V	R5	16	100	0.5	1	0.6	8	0.1	0.15	0.7
SMD1206C050SF30V	R5	30	100	0.5	1	0.6	8	0.1	0.15	0.7
SMD1206C075SF6V	R7	6	100	0.75	1.5	0.6	8	0.2	0.09	0.5
SMD1206C075SF16V	R7	16	100	0.75	1.5	0.6	8	0.2	0.09	0.5
SMD1206C075SF30V	R7	30	100	0.75	1.5	0.6	8	0.2	0.09	0.5
SMD1206C100SF6V	R0	6	100	1	1.8	0.6	8	0.3	0.055	0.27
SMD1206C100SF16V	R0	16	100	1	1.8	0.6	8	0.3	0.055	0.27
SMD1206C110SF6V	R0	6	100	1.1	2.2	0.6	8	0.3	0.05	0.25
SMD1206C150SF6V	RX	6	100	1.5	3	0.8	8	0.3	0.025	0.13
SMD1206C150SF13.2V	RX	13.2	100	1.5	3	0.8	8	0.3	0.025	0.13
SMD1206C200SF6V	RY	6	100	2	3.5	0.8	8	1.5	0.018	0.08
SMD1206C200SF12V	RY	12	100	2	3.5	0.8	8	1.5	0.018	0.08
SMD1206C260SF6V	R-	6	100	2.6	5.2	0.8	8	2	0.015	0.06
SMD1206C300SF6V	RU	6	100	3	6	0.8	8	4	0.01	0.055

$I_H$ =Hold current: maximum current at which the device will not trip at 25°C still air.

$I_T$ =Trip current: minimum current at which the device will always trip at 25°C still air.

$V_{max}$ =Maximum voltage device can withstand without damage at rated current.

$I_{max}$ =Maximum fault current device can withstand without damage at rated voltage.

$P_d$ =Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

$R_{i\ min}$ =Minimum device resistance at 25°C prior to tripping.

$R_{max}$ =Maximum resistance of device when measured one hour post trip at 25°C.

## Test Procedures And Requirements

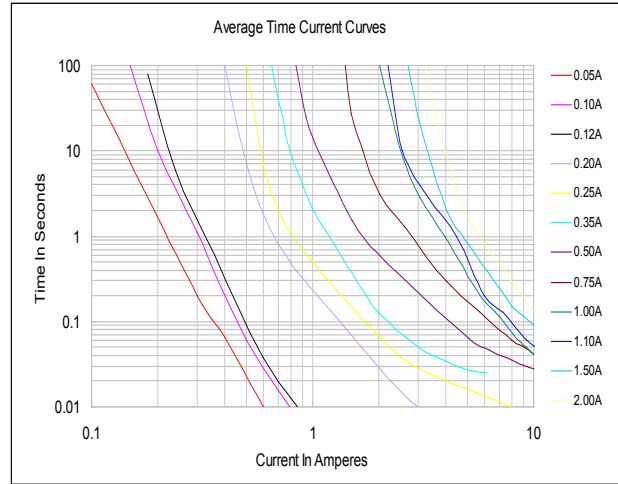
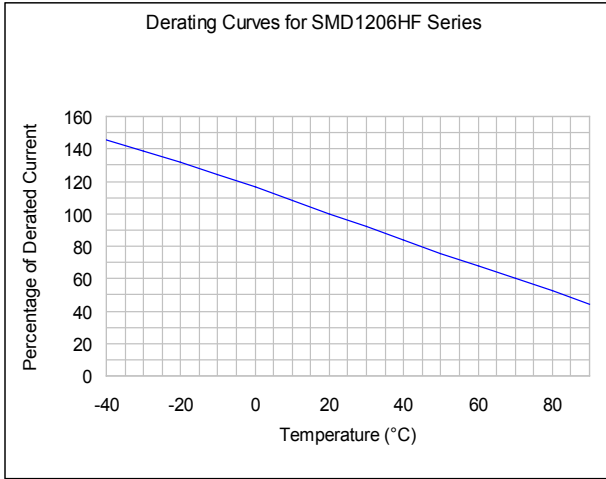
Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ 25°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	Specified current, $V_{max}$ , 25°C	$T \leq$ maximum Time to Trip
Hold Current	30min, at $I_H$	No trip
Trip Cycle Life	$V_{max}$ , $I_{max}$ , 100cycles	No arcing or burning
Trip Endurance	$V_{max}$ , 24hours	No arcing or burning

## Thermal Derating Chart

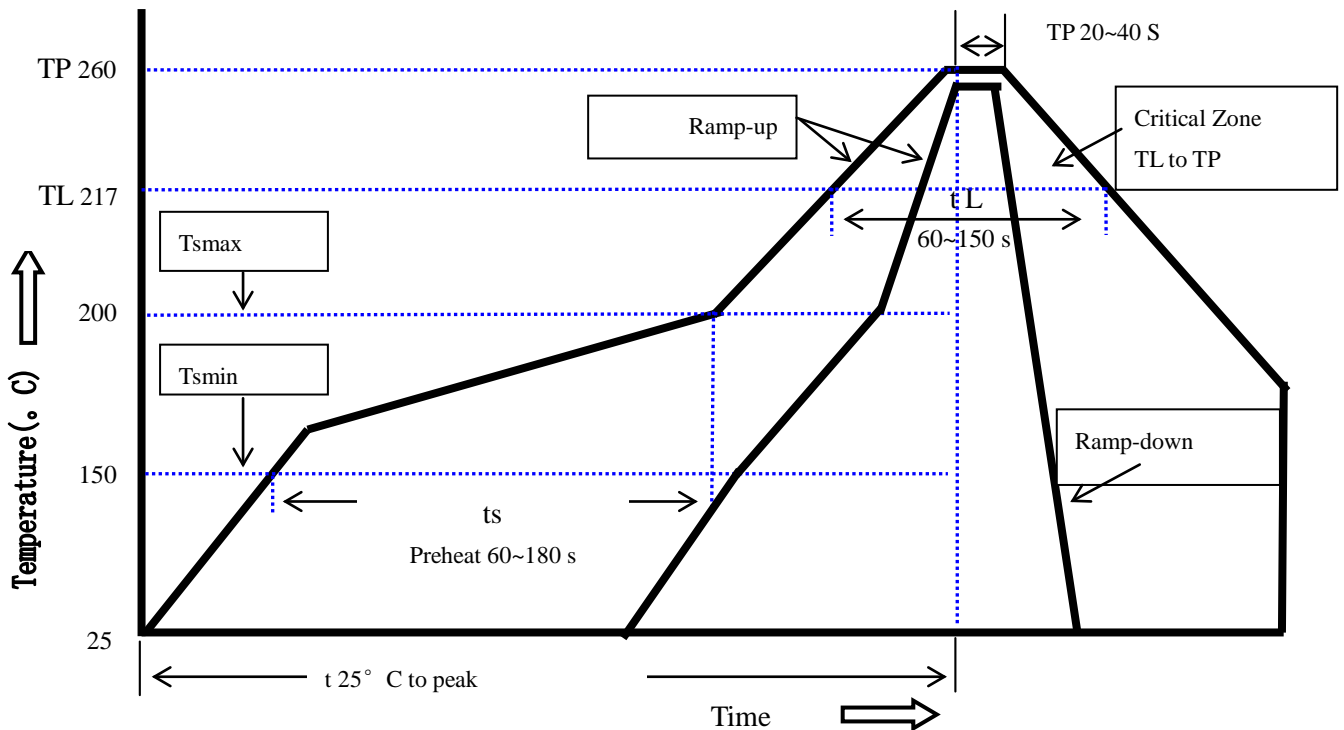
### Recommended Hold Current (A) at Ambient Temperature (°C)

Part Number	Ambient Operation Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SMD1206C005SF	0.074	0.066	0.058	0.05	0.0425	0.0375	0.035	0.03	0.0275
SMD1206C010SF	0.148	0.132	0.116	0.1	0.085	0.075	0.07	0.06	0.055
SMD1206C012SF	0.18	0.16	0.14	0.12	0.1	0.09	0.08	0.07	0.07
SMD1206C020SF	0.3	0.26	0.23	0.2	0.17	0.15	0.14	0.12	0.11
SMD1206C025SF	0.37	0.33	0.29	0.25	0.22	0.2	0.17	0.15	0.12
SMD1206C035SF	0.5	0.45	0.4	0.35	0.3	0.27	0.24	0.21	0.15
SMD1206C050SF	0.71	0.64	0.57	0.5	0.42	0.39	0.35	0.31	0.25
SMD1206C050SF/13.2	0.71	0.64	0.57	0.5	0.42	0.39	0.35	0.31	0.25
SMD1206C075SF	1.14	1.01	0.88	0.75	0.65	0.59	0.54	0.49	0.41
SMD1206C100SF	1.45	1.31	1.15	1	0.84	0.77	0.69	0.61	0.48
SMD1206C110SF	1.6	1.45	1.3	1.1	0.95	0.8	0.72	0.66	0.55
SMD1206C150SF	2.18	1.94	1.72	1.5	1.28	1.17	1.06	0.96	0.77
SMD1206C200SF	2.88	2.63	2.34	2	1.74	1.58	1.42	1.17	0.93

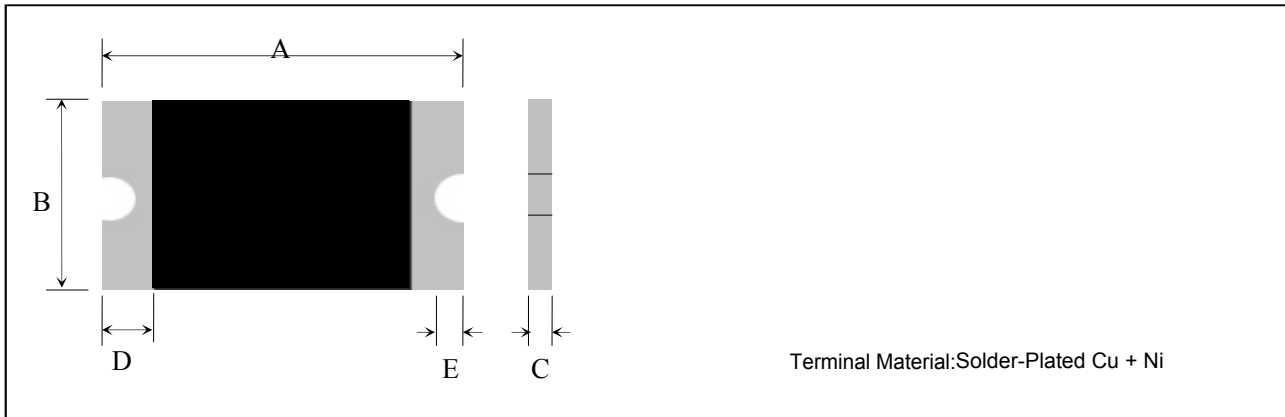
**Typical Characteristics**



**Solder Reflow Recommendations**



## Product Dimension



Part Number	A		B		D		E	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Min.
SMD1206C005SF60V	3	3.5	1.5	1.8	0.7	1.3	0.15	0.1
SMD1206C010SF60V	3	3.5	1.5	1.8	0.7	1.3	0.15	0.1
SMD1206C012SF60V	3	3.5	1.5	1.8	0.7	1.3	0.15	0.1
SMD1206C020SF24V	3	3.5	1.5	1.8	0.5	1	0.15	0.1
SMD1206C025SF16V	3	3.5	1.5	1.8	0.5	1	0.15	0.1
SMD1206C035SF6V	3	3.5	1.5	1.8	0.5	1	0.15	0.1
SMD1206C035SF30V	3	3.5	1.5	1.8	0.9	1.6	0.15	0.1
SMD1206C050SF6V	3	3.5	1.5	1.8	0.5	1	0.15	0.1
SMD1206C050SF13.2V	3	3.5	1.5	1.8	0.5	1	0.15	0.1
SMD1206C050SF16V	3	3.5	1.5	1.8	0.8	1.4	0.15	0.1
SMD1206C050SF30V	3	3.5	1.5	1.8	0.9	1.6	0.15	0.1
SMD1206C075SF6V	3	3.5	1.5	1.8	0.4	0.8	0.15	0.1
SMD1206C075SF16V	3	3.5	1.5	1.8	0.8	1.4	0.15	0.1
SMD1206C075SF30V	3	3.5	1.5	1.8	0.9	1.6	0.15	0.1
SMD1206C100SF6V	3	3.5	1.5	1.8	0.4	0.8	0.15	0.1
SMD1206C100SF16V	3	3.5	1.5	1.8	0.5	1.1	0.15	0.1
SMD1206C110SF6V	3	3.5	1.5	1.8	0.4	0.8	0.15	0.1
SMD1206C150SF6V	3	3.5	1.5	1.8	0.6	1.2	0.15	0.1
SMD1206C150SF13.2V	3	3.5	1.5	1.8	0.8	1.4	0.15	0.1
SMD1206C200SF6V	3	3.5	1.5	1.8	0.8	1.4	0.15	0.1
SMD1206C200SF12V	3	3.5	1.5	1.8	0.9	1.6	0.15	0.1
SMD1206C260SF6V	3	3.5	1.5	1.8	0.9	1.6	0.15	0.1
SMD1206C300SF6V	3	3.5	1.5	1.8	0.9	1.6	0.15	0.1

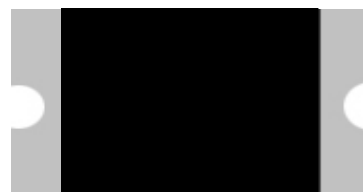
## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
SMD1206C005.010.012.150.200.260.300SF	1206	Tape&Reel	3500pcs / Reel	EIA STD RS-481
SMD1206C020.025.035.050.075.100.110SF	1206	Tape&Reel	4500pcs / Reel	EIA STD RS-481

## Polyswitch Resettable PTC in 1210

### Features

- Surface Mount Devices
- Standard 1210mils footprint
- Surface mount packaging for automated assembly
- Compatible with Pb and Pb-free solder reflow profiles.



### Applications

- Mobile phones- Battery and port protection
- PC motherboards – Plug and Play protection
- PDAs/Digital cameras
- USB port protection
- HDMI source protection
- Game console port protection

### Electrical Characteristics

Part Number	Marking	$V_{max}$	$I_{max}$	$I_{hold}$	$I_{trip}$	$P_d$	Maximum Time To Trip		$R_{imin}$	$R_{1max}$
		(Vdc)	(A)	(A)	(A)	(W)	Current(A)	Time(Sec)	( $\Omega$ )	( $\Omega$ )
SMD1210C005SF30V	RA	30	100	0.05	0.15	0.6	0.25	1.5	2.8	50
SMD1210C010SF30V	R1	30	100	0.1	0.3	0.6	0.5	0.6	0.8	15
SMD1210C020SF30V	R2	30	100	0.2	0.4	0.6	8	0.02	0.4	5
SMD1210C035SF6V	R3	6	100	0.35	0.75	0.6	8	0.2	0.2	1.3
SMD1210C035SF16V	R3	16	100	0.35	0.75	0.6	8	0.2	0.2	1.3
SMD1210C050SF13.2V	R5	13.2	100	0.5	1	0.6	8	0.1	0.18	0.9
SMD1210C050SF24V	R5	24	100	0.5	1	0.6	8	0.1	0.18	0.9
SMD1210C075SF6V	R7	6	100	0.75	1.5	0.6	8	0.1	0.07	0.4
SMD1210C075SF16V	R7	16	100	0.75	1.5	0.6	8	0.1	0.07	0.4
SMD1210C110SF6V	R0	6	100	1.1	2.2	0.6	8	0.3	0.05	0.21
SMD1210C150SF6V	RX	6	100	1.5	3	0.6	8	0.5	0.03	0.11
SMD1210C150SF12V	RX	12	100	1.5	3	0.6	8	0.5	0.03	0.11
SMD1210C175SF6V	RY	6	100	1.75	3.5	0.8	8	0.6	0.02	0.08
SMD1210C200SF6V	RZ	6	100	2	4	0.8	8	1	0.015	0.07
SMD1210C260SF6V	R—	6	100	2.6	5.2	0.8	8	2	0.01	0.06



$I_H$ =Hold current: maximum current at which the device will not trip at 25°C still air.

$I_T$ =Trip current: minimum current at which the device will always trip at 25°C still air.

$V_{max}$ =Maximum voltage device can withstand without damage at rated current.

$I_{max}$ =Maximum fault current device can withstand without damage at rated voltage.

$P_d$ =Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

$R_{i\ min}$ =Minimum device resistance at 25°C prior to tripping.

$R_{max}$ =Maximum resistance of device when measured one hour post trip at 25°C.

## Test Procedures And Requirements

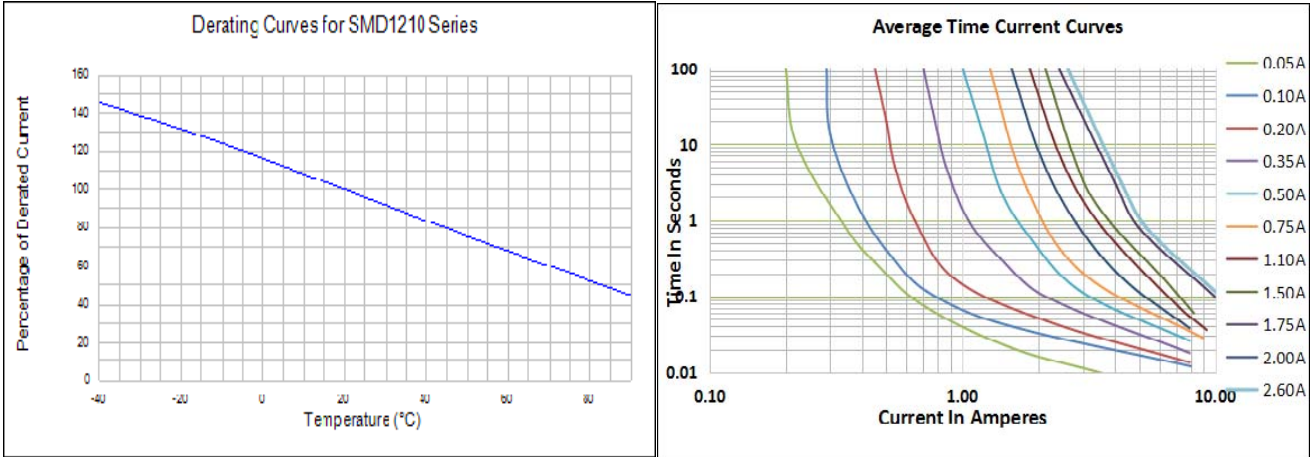
Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ 25°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	Specified current, $V_{max}$ , 25°C	$T \leq$ maximum Time to Trip
Hold Current	30min, at $I_H$	No trip
Trip Cycle Life	$V_{max}$ , $I_{max}$ , 100cycles	No arcing or burning
Trip Endurance	$V_{max}$ , 24hours	No arcing or burning

## Thermal Derating Chart

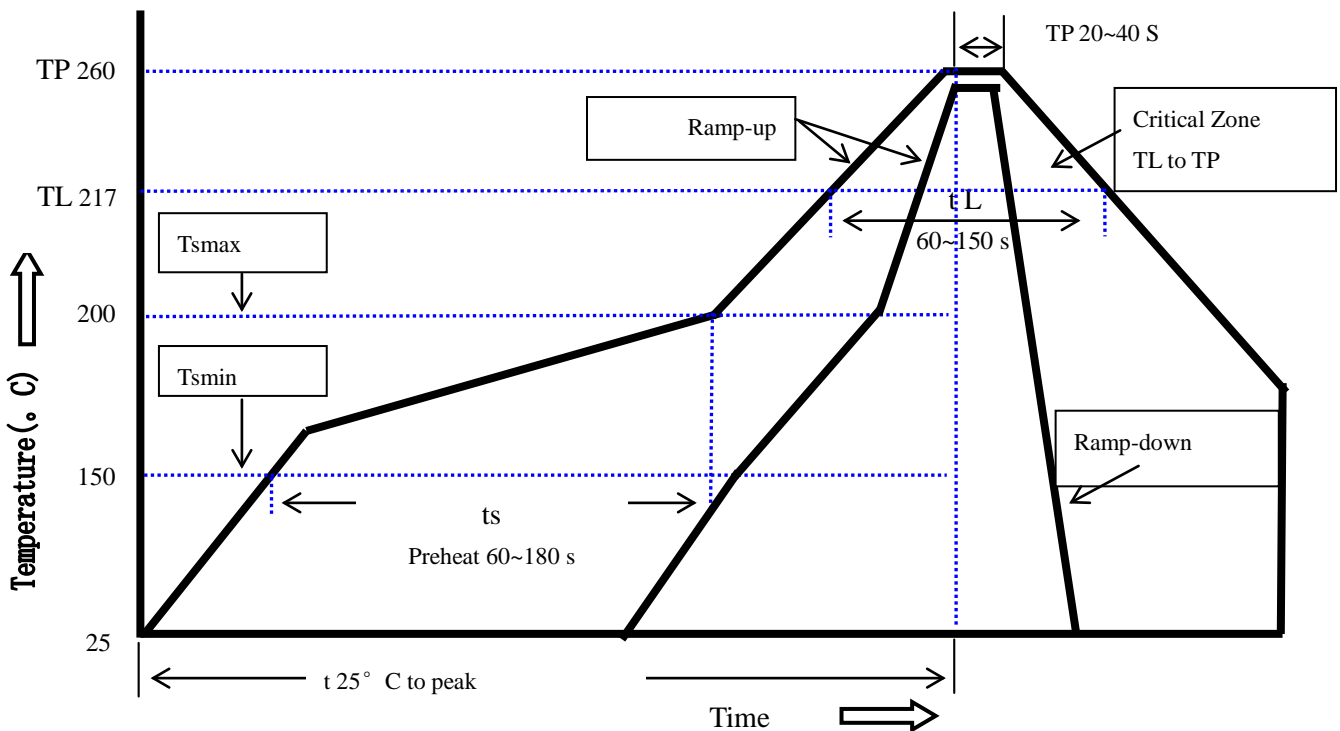
Recommended Hold Current (A) at Ambient Temperature (°C)

Part Number	Ambient Operation Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SMD1210C005SF	0.08	0.07	0.06	0.05	0.04	0.04	0.03	0.03	0.02
SMD1210C010SF	0.16	0.14	0.12	0.1	0.08	0.07	0.06	0.05	0.03
SMD1210C020SF	0.29	0.26	0.22	0.2	0.16	0.14	0.13	0.11	0.08
SMD1210C035SF	0.47	0.45	0.4	0.35	0.33	0.28	0.24	0.21	0.18
SMD1210C050SF	0.76	0.67	0.58	0.5	0.43	0.4	0.36	0.32	0.28
SMD1210C075SF	1	0.97	0.86	0.75	0.64	0.59	0.54	0.48	0.4
SMD1210C110SF	1.69	1.48	1.29	1.1	0.88	0.76	0.65	0.57	0.43
SMD1210C150SF	2.13	1.92	1.71	1.5	1.26	1.14	1.01	0.89	0.71
SMD1210C175SF	2.54	2.3	2.02	1.75	1.47	1.33	1.18	1.05	0.86
SMD1210C200SF	2.9	2.63	2.31	2	1.68	1.52	1.35	1.2	0.98
SMD1210C260SF	3.43	3.22	2.93	2.6	2.23	2.03	1.87	1.57	1.35

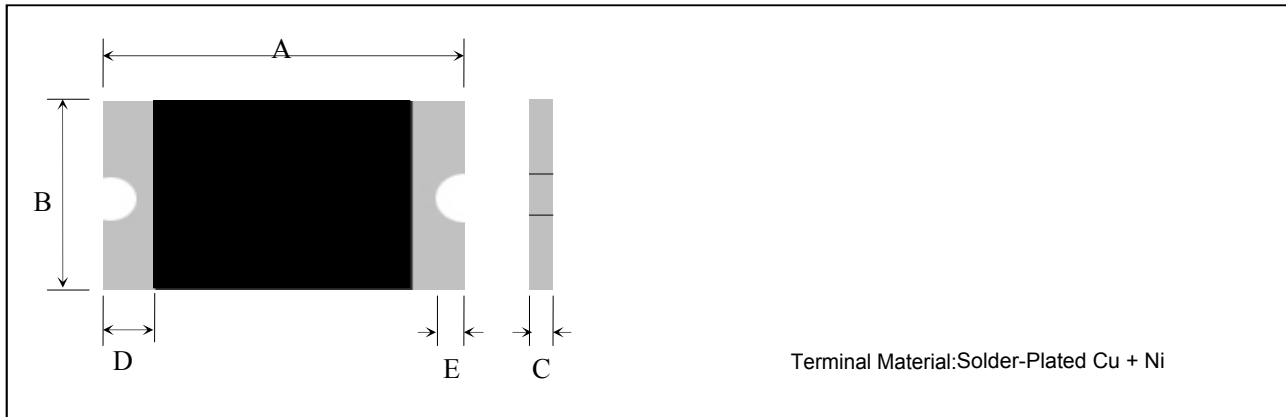
**Typical Characteristics**



**Solder Reflow Recommendations**



## Product Dimension



Part Number	A		B		C		D	E
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Min.
SMD1210C005SF30V	3	3.5	2.35	2.8	0.6	1.2	0.3	0.1
SMD1210C010SF30V	3	3.5	2.35	2.8	0.6	1.2	0.3	0.1
SMD1210C020SF30V	3	3.5	2.35	2.8	0.6	1.2	0.3	0.1
SMD1210C035SF6V	3	3.5	2.35	2.8	0.6	1.2	0.3	0.1
SMD1210C035SF16V	3	3.5	2.35	2.8	0.5	1.1	0.3	0.1
SMD1210C050SF13.2V	3	3.5	2.35	2.8	0.5	1.1	0.3	0.1
SMD1210C050SF24V	3	3.5	2.35	2.8	0.5	1.1	0.3	0.1
SMD1210C075SF6V	3	3.5	2.35	2.8	0.5	1.1	0.3	0.1
SMD1210C075SF16V	3	3.5	2.35	2.8	0.5	1.1	0.3	0.1
SMD1210C110SF6V	3	3.5	2.35	2.8	0.5	1.1	0.3	0.1
SMD1210C150SF6V	3	3.5	2.35	2.8	0.5	1.1	0.3	0.1
SMD1210C150SF12V	3	3.5	2.35	2.8	0.5	1.2	0.3	0.1
SMD1210C175SF6V	3	3.5	2.35	2.8	0.8	1.4	0.3	0.1
SMD1210C200SF6V	3	3.5	2.35	2.8	0.8	1.4	0.3	0.1
SMD1210C260SF6V	3	3.5	2.35	2.8	1	1.6	0.3	0.1

## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
SMD1210 Series	1210	Tape&Reel	4000pcs / Reel	EIA STD RS-481

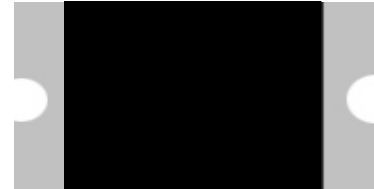
## Polyswitch Resettable PTC in 1812

### Features

- Surface Mount Devices
- Standard 1812mils footprint
- Surface mount packaging for automated assembly
- Compatible with Pb and Pb-free solder reflow profiles.

### Applications

- Mobile phones- Battery and port protection
- PC motherboards – Plug and Play protection
- PDAs/Digital cameras
- USB port protection
- HDMI source protection
- Game console port protection



### Electrical Characteristics

Part Number	V <sub>max</sub>	I <sub>max</sub>	I <sub>hold</sub>	I <sub>trip</sub>	P <sub>d</sub>	Maximum Time To Trip		R <sub>imin</sub>	R <sub>1max</sub>
	(Vdc)	(A)	(A)	(A)	(W)	Current(A)	Time(Sec)	(Ω)	(Ω)
SMD1812C010SF30V	30	100	0.1	0.3	0.8	0.5	1.5	0.75	15
SMD1812C010SF60V	60	100	0.1	0.3	0.8	0.5	1.5	0.75	15
SMD1812C014SF60V	60	100	0.14	0.34	0.8	1.5	0.15	0.5	6
SMD1812C020SF30V	30	100	0.2	0.4	0.8	8	0.02	0.35	5
SMD1812C020SF60V	60	100	0.2	0.4	0.8	8	0.02	0.35	5
SMD1812C030SF30V	30	100	0.3	0.6	0.8	8	0.1	0.25	3
SMD1812C030SF60V	60	100	0.3	0.6	0.8	8	0.1	0.25	3
SMD1812C050SF15V	15	100	0.5	1	0.8	8	0.15	0.1	1
SMD1812C050SF33V	33	100	0.5	1	0.8	8	0.15	0.1	1
SMD1812C050SF60V	60	100	0.5	1	0.8	8	0.15	0.1	1.4
SMD1812C075SF13.2V	13.2	100	0.75	1.5	0.8	8	0.2	0.06	0.45
SMD1812C075SF24V	24	100	0.75	1.5	0.8	8	0.2	0.06	0.45
SMD1812C075SF33V	33	100	0.75	1.5	0.8	8	0.2	0.06	0.45
SMD1812C110SF8V	8	100	1.1	2.2	0.8	8	0.3	0.035	0.25
SMD1812C110SF16V	16	100	1.1	2.2	0.8	8	0.3	0.035	0.25
SMD1812C110SF24V	24	100	1.1	2.2	0.8	8	0.3	0.035	0.25
SMD1812C110SF33V	33	100	1.1	2.2	0.8	8	0.3	0.035	0.25
SMD1812C125SF16V	16	100	1.25	2.5	0.8	8	0.4	0.03	0.14
SMD1812C125SF33V	33	100	1.25	2.5	0.8	8	0.4	0.03	0.14
SMD1812C150SF8V	8	100	1.5	3	0.8	8	0.5	0.025	0.16
SMD1812C150SF16V	16	100	1.5	3	0.8	8	0.5	0.025	0.16
SMD1812C150SF24V	24	100	1.5	3	0.8	8	0.5	0.025	0.16
SMD1812C160SF8V	8	100	1.6	2.8	0.8	8	1	0.02	0.13
SMD1812C160SF16V	16	100	1.6	2.8	0.8	8	1	0.02	0.13
SMD1812C200SF8V	8	100	2	4	0.8	8	2	0.01	0.1
SMD1812C200SF16V	16	100	2	4	0.8	8	2	0.01	0.1
SMD1812C200SF24V	24	100	2	4	0.8	8	2	0.01	0.1
SMD1812C200SF33V	33	100	2	4	0.8	8	2	0.01	0.1
SMD1812C260SF8V	8	100	2.6	5	0.8	8	2.5	0.006	0.05
SMD1812C260SF16V	16	100	2.6	5	0.8	8	2.5	0.006	0.05
SMD1812C300SF8V	8	100	3	5	0.8	8	4	0.005	0.04
SMD1812C350SF6V	6	100	3.5	6	2	10	4	0.003	0.03
SMD1812C400SF6V	6	100	4	8	2	20	4	0.0025	0.025

$I_H$ =Hold current: maximum current at which the device will not trip at 25°C still air.

$I_T$ =Trip current: minimum current at which the device will always trip at 25°C still air.

$V_{max}$ =Maximum voltage device can withstand without damage at rated current.

$I_{max}$ =Maximum fault current device can withstand without damage at rated voltage.

$P_d$ =Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

$R_{i\ min}$ =Minimum device resistance at 25°C prior to tripping.

$R_{max}$ =Maximum resistance of device when measured one hour post trip at 25°C.

## Test Procedures And Requirements

Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ 25°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	Specified current, $V_{max}$ , 25°C	$T \leq$ maximum Time to Trip
Hold Current	30min, at $I_H$	No trip
Trip Cycle Life	$V_{max}$ , $I_{max}$ , 100cycles	No arcing or burning
Trip Endurance	$V_{max}$ , 24hours	No arcing or burning

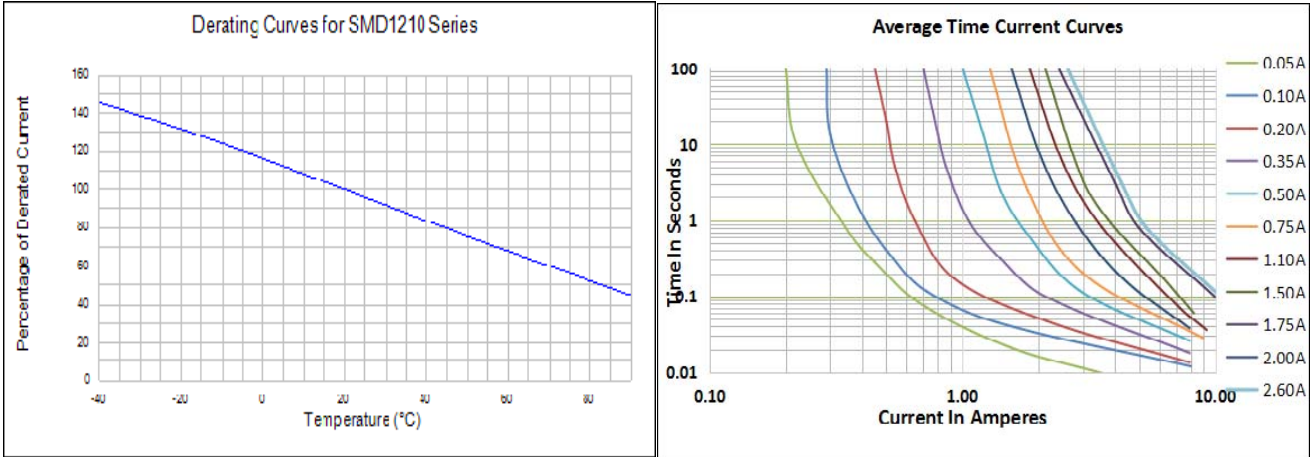
## Thermal Derating Chart

Recommended Hold Current (A) at Ambient Temperature (°C)

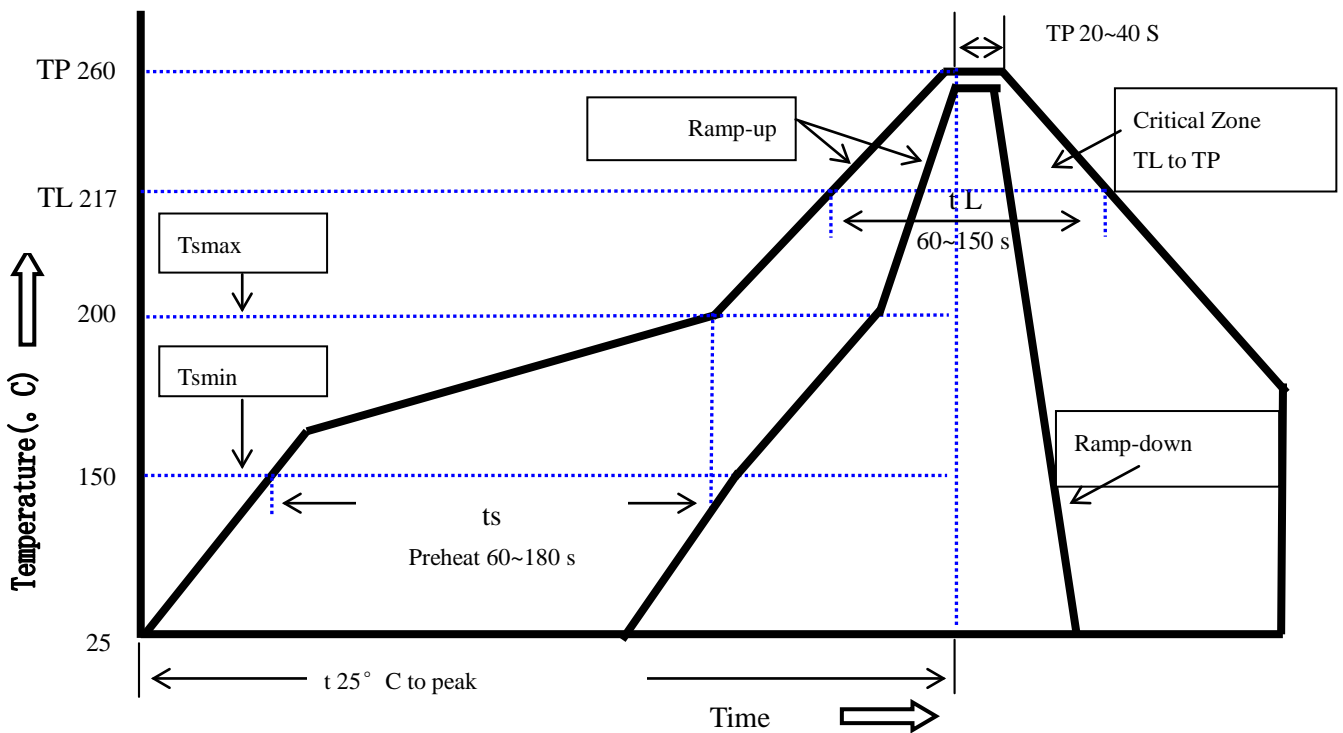
Part Number	Ambient Operation Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SMD1812C010SF	0.16	0.14	0.12	0.1	0.08	0.07	0.06	0.05	0.03
SMD1812C014SF	0.23	0.19	0.17	0.14	0.12	0.1	0.09	0.08	0.06
SMD1812C020SF	0.29	0.26	0.23	0.2	0.17	0.15	0.14	0.12	0.1
SMD1812C030SF	0.44	0.39	0.35	0.3	0.26	0.23	0.21	0.18	0.15
SMD1812C050SF	0.59	0.57	0.55	0.5	0.45	0.43	0.35	0.3	0.23
SMD182C075SF	1.1	0.99	0.87	0.75	0.63	0.57	0.49	0.45	0.35
SMD1812C110SF	1.6	1.45	1.28	1.1	0.92	0.83	0.71	0.66	0.52
SMD1812C110SF16V	1.59	1.44	1.27	1.1	0.92	0.82	0.7	0.64	0.5
SMD1812C125SF	2	1.75	1.52	1.25	1	0.95	0.9	0.75	0.53
SMD1812C150SF	2.3	2.05	1.77	1.5	1.23	1.09	0.95	0.82	0.61
SMD1812C150SF16V	2.28	2.03	1.75	1.5	1.21	1.07	0.93	0.79	0.58
SMD1812C160SF	2.1	1.96	1.88	1.6	1.26	1.12	0.98	0.84	0.63
SMD1812C200SF	2.88	2.61	2.25	2	1.8	1.66	1.45	1.09	0.8
SMD1812C260SF	3.9	3.42	2.96	2.6	2.33	2.07	1.94	1.35	1
SMD1812C300SF	4.15	3.76	3.46	3	2.55	2.28	2.01	1.61	1.33
SMD1812C350SF	4.84	4.39	4.04	3.5	2.98	2.66	2.35	1.88	1.55
SMD1812C400SF	4.32	4.97	4.62	4	3.48	3.16	2.85	2.38	2.05



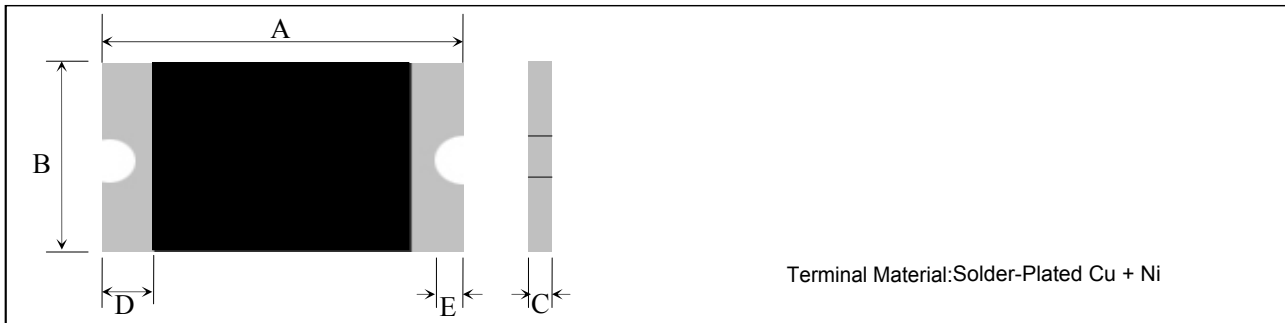
**Typical Characteristics**



**Solder Reflow Recommendations**



## Product Dimension



Part Number	A		B		C		D	E
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Min.
SMD1812C010SF30V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C010SF60V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C014SF60V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C020SF30V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C020SF60V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C030SF30V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C030SF60V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C050SF15V	4.37	4.73	3.07	3.41	0.4	1	0.3	0.25
SMD1812C050SF33V	4.37	4.73	3.07	3.41	0.4	1	0.3	0.25
SMD1812C050SF60V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C075SF13.2V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C075SF24V	4.37	4.73	3.07	3.41	0.6	1.3	0.3	0.25
SMD1812C075SF33V	4.37	4.73	3.07	3.41	0.6	1.3	0.3	0.25
SMD1812C110SF8V	4.37	4.73	3.07	3.41	0.4	1	0.3	0.25
SMD1812C110SF16V	4.37	4.73	3.07	3.41	0.4	1	0.3	0.25
SMD1812C110SF24V	4.37	4.73	3.07	3.41	0.6	1.3	0.3	0.25
SMD1812C110SF33V	4.37	4.73	3.07	3.41	0.6	1.3	0.3	0.25
SMD1812C125SF16V/33V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C150SF8V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C150SF16V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C150SF24V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C160SF8V/16V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C200SF8V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C200SF16V	4.37	4.73	3.07	3.41	0.5	1.1	0.3	0.25
SMD1812C200SF24V	4.37	4.73	3.07	3.41	0.8	1.5	0.3	0.25
SMD1812C200SF33V	4.37	4.73	3.07	3.41	0.8	1.5	0.3	0.25
SMD1812C260SF8V	4.37	4.73	3.07	3.41	0.8	1.5	0.3	0.25
SMD1812C260SF16V	4.37	4.73	3.07	3.41	0.8	1.5	0.3	0.25
SMD1812C300SF8V	4.37	4.73	3.07	3.41	0.8	1.5	0.3	0.25
SMD1812C350SF6V	4.37	4.73	3.07	3.41	0.8	1.5	0.3	0.25
SMD1812C400SF6V	4.37	4.73	3.07	3.41	0.8	1.5	0.3	0.25

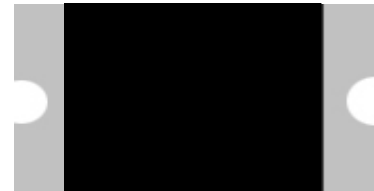
## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
SMD1812 Series	1812	Tape&Reel	1500pcs / Reel	EIA STD RS-481

## Polyswitch Resettable PTC in 2018

### Features

- Surface Mount Devices
- Standard 2018mils footprint
- Surface mount packaging for automated assembly
- Compatible with Pb and Pb-free solder reflow profiles.



### Applications

- Mobile phones- Battery and port protection
- PC motherboards – Plug and Play protection
- PDAs/Digital cameras
- USB port protection
- HDMI source protection
- Game console port protection

### Electrical Characteristics

Part Number	$V_{max}$	$I_{max}$	$I_{hold}$	$I_{trip}$	$P_d$	Maximum Time To Trip		$R_{imin}$	$R_{1max}$
	(Vdc)	(A)	(A)	(A)	(W)	Current(A)	Time(Sec)	( $\Omega$ )	( $\Omega$ )
SMD2018C030SF60V	60	100	0.3	0.6	0.9	1.5	3	0.5	2.3
SMD2018C050SF60V	60	100	0.55	1.2	1	2.5	3	0.2	1
SMD2018C100SF15V	15	100	1.1	2.2	1.1	8	0.4	0.06	0.36
SMD2018C100SF33V	33	100	1.1	2.2	1.1	8	0.4	0.06	0.36
SMD2018C150SF15V	15	100	1.5	3	1.1	8	0.8	0.05	0.17
SMD2018C200SF10V	10	100	2	4	1.1	8	2.4	0.03	0.1

$I_H$ =Hold current: maximum current at which the device will not trip at 25°C still air.

$I_T$ =Trip current: minimum current at which the device will always trip at 25°C still air.

$V_{max}$ =Maximum voltage device can withstand without damage at rated current.

$I_{max}$ =Maximum fault current device can withstand without damage at rated voltage.

$P_d$ =Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

$R_{i\ min}$ =Minimum device resistance at 25°C prior to tripping.

$R_{max}$ =Maximum resistance of device when measured one hour post trip at 25°C.

## Test Procedures And Requirements

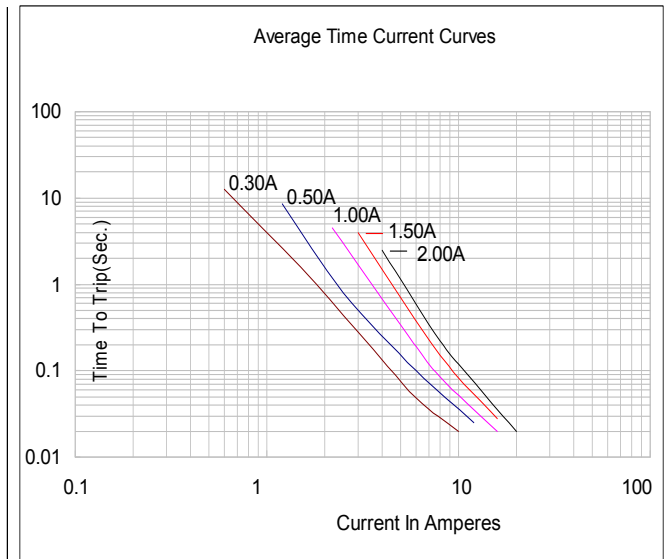
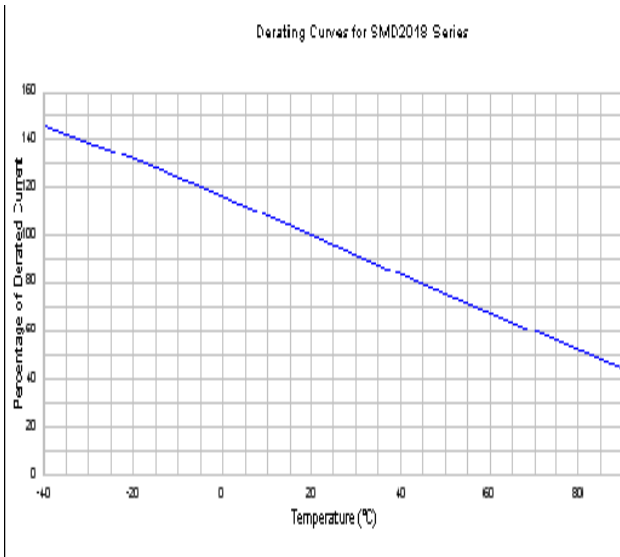
Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ 25°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	Specified current, $V_{max}$ , 25°C	$T \leq$ maximum Time to Trip
Hold Current	30min, at $I_H$	No trip
Trip Cycle Life	$V_{max}$ , $I_{max}$ , 100cycles	No arcing or burning
Trip Endurance	$V_{max}$ , 24hours	No arcing or burning

## Thermal Derating Chart

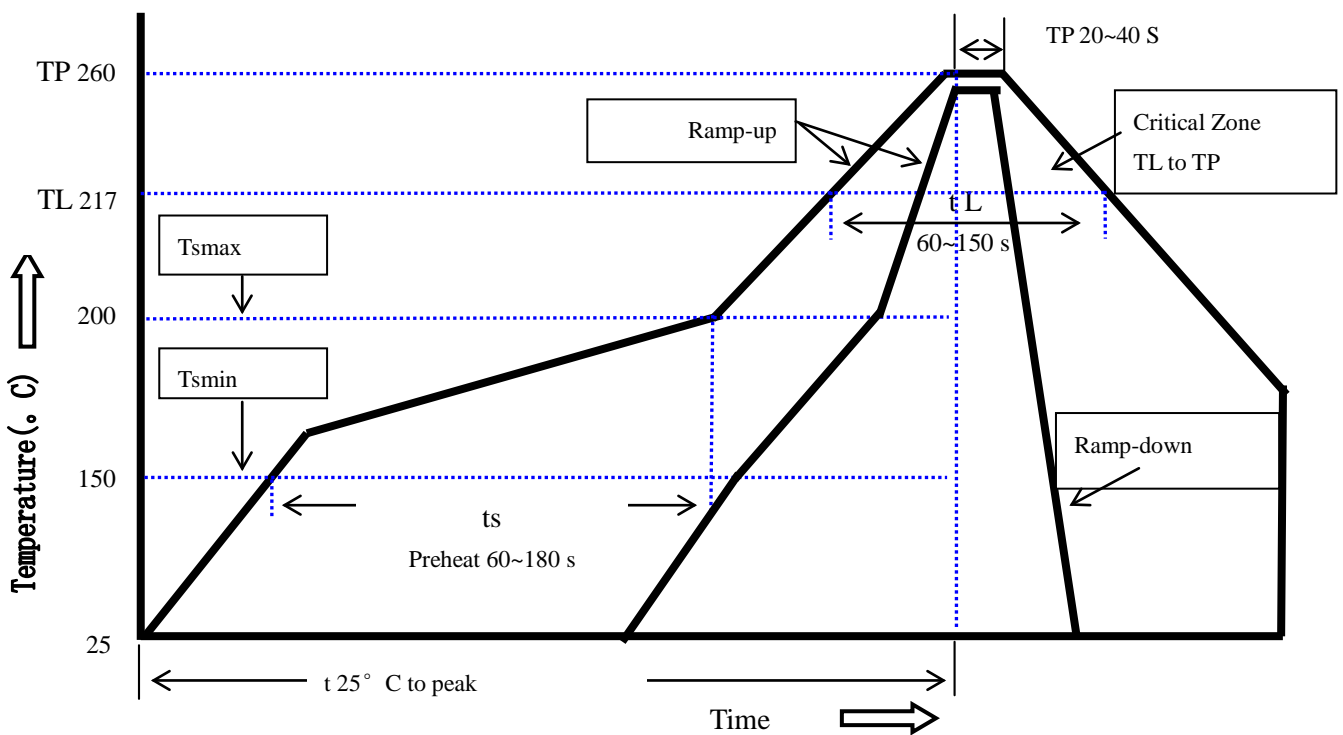
Recommended Hold Current (A) at Ambient Temperature (°C)

Part Number	Ambient Operation Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SMD2018C030SF60V	0.48	0.42	0.35	0.3	0.24	0.21	0.17	0.15	0.1
SMD2018C050SF60V	0.87	0.77	0.67	0.55	0.46	0.41	0.36	0.31	0.23
SMD2018C100SF15V	1.71	1.52	1.32	1.1	0.94	0.84	0.74	0.64	0.5
SMD2018C100SF33V	1.71	1.52	1.32	1.1	0.94	0.84	0.74	0.64	0.5
SMD2018C150SF15V	2.38	2.1	1.82	1.5	1.27	1.13	0.99	0.85	0.64
SMD2018C200SF10V	2.95	2.65	2.35	2	1.74	1.59	1.44	1.29	1.06

**Typical Characteristics**

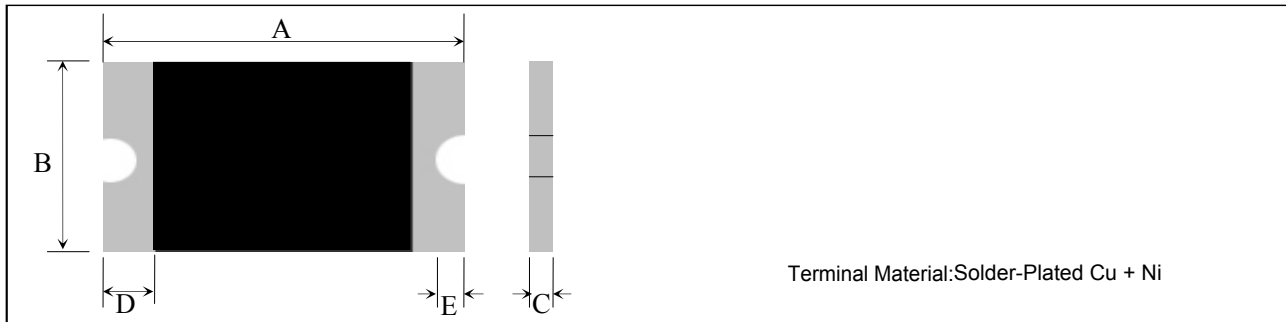


**Solder Reflow Recommendations**





## Product Dimension



Part Number	A		B		C		D	E
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Min.
SMD2018C030SF60V	4.72	5.44	4.22	4.93	0.6	1.1	0.3	4.72
SMD2018C050SF60V	4.72	5.44	4.22	4.93	0.7	1.3	0.3	4.72
SMD2018C100SF15V	4.72	5.44	4.22	4.93	0.45	0.8	0.3	4.72
SMD2018C100SF33V	4.72	5.44	4.22	4.93	0.45	0.8	0.3	4.72
SMD2018C150SF15V	4.72	5.44	4.22	4.93	0.45	0.8	0.3	4.72
SMD2018C200SF10V	4.72	5.44	4.22	4.93	0.4	0.8	0.3	4.72

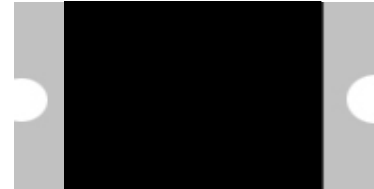
## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
SMD2018C030.050SF	2018	Tape&Reel	1500pcs / Reel	EIA STD RS-481
SMD2018C100.150.200SF	2018	Tape&Reel	2500pcs / Reel	EIA STD RS-481

## Polyswitch Resettable PTC in 2920

### Features

- Surface Mount Devices
- Standard 2920mils footprint
- Surface mount packaging for automated assembly
- Compatible with Pb and Pb-free solder reflow profiles.



### Applications

- Mobile phones- Battery and port protection
- PC motherboards – Plug and Play protection
- PDAs/Digital cameras
- USB port protection
- HDMI source protection
- Game console port protection

### Electrical Characteristics

Part Number	V <sub>max</sub>	I <sub>max</sub>	I <sub>hold</sub>	I <sub>trip</sub>	P <sub>d</sub>	Maximum Time To Trip		R <sub>imin</sub>	R <sub>1max</sub>
	(Vdc)	(A)	(A)	(A)	(W)	Current(A)	Time(Sec)	(Ω)	(Ω)
SMD2920C030SF60V	60	10	0.3	0.6	1.5	1.5	3	0.6	4.8
SMD2920C050SF60V	60	10	0.5	1	1.5	2.5	4	0.18	1.4
SMD2920C075SF60V	60	40	0.75	1.5	1.5	8	0.3	0.1	1
SMD2920C100SF33V	33	40	1.1	2.2	1.5	8	0.5	0.065	0.41
SMD2920C125SF33V	33	40	1.25	2.5	1.5	8	2	0.05	0.25
SMD2920C150SF33V	33	40	1.5	3	1.5	8	2	0.035	0.23
SMD2920C185SF33V	33	40	1.85	3.7	1.5	8	2.5	0.03	0.15
SMD2920C200SF16V	16	40	2	4	1.5	8	4.5	0.02	0.12
SMD2920C250SF16V	16	40	2.5	5	1.5	8	16	0.02	0.085
SMD2920C260SF6V	6	40	2.6	5.2	1.5	8	10	0.014	0.075
SMD2920C300SF6V	6	40	3	6	1.5	8	20	0.012	0.048
SMD2920C300SF16V	16	40	3	6	1.5	8	20	0.012	0.048
SMD2920C400SF16V	16	40	4	8	1.5	20	4	0.008	0.04
SMD2920C500SF6V	6	40	5	10	1.5	25	5	0.005	0.031
SMD2920C500SF12V	12	40	5	10	1.5	25	5	0.005	0.031
SMD2920C500SF16V	16	40	5	10	1.5	25	5	0.005	0.031
SMD2920C600SF6V	6	40	6	12	1.5	25	6	0.003	0.025

$I_H$ =Hold current: maximum current at which the device will not trip at 25°C still air.

$I_T$ =Trip current: minimum current at which the device will always trip at 25°C still air.

$V_{max}$ =Maximum voltage device can withstand without damage at rated current.

$I_{max}$ =Maximum fault current device can withstand without damage at rated voltage.

$P_d$ =Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

$R_{i\ min}$ =Minimum device resistance at 25°C prior to tripping.

$R_{max}$ =Maximum resistance of device when measured one hour post trip at 25°C.

## Test Procedures And Requirements

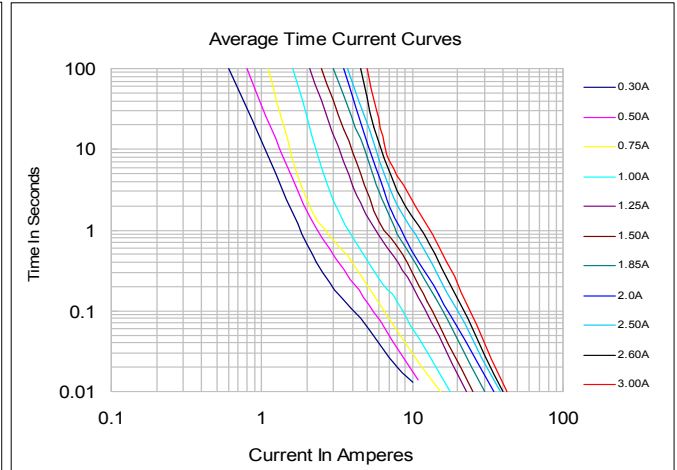
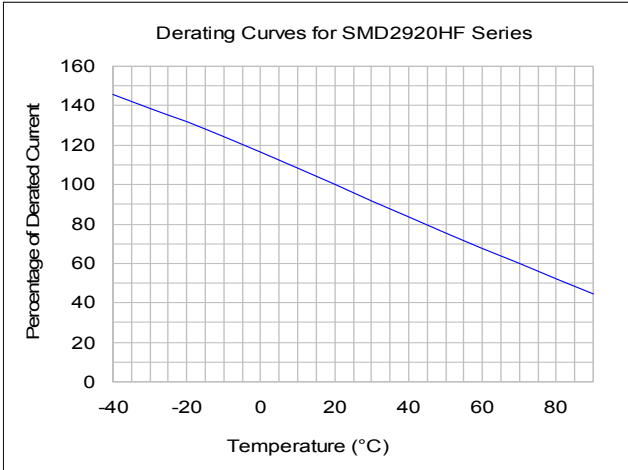
Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ 25°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	Specified current, $V_{max}$ , 25°C	$T \leq$ maximum Time to Trip
Hold Current	30min, at $I_H$	No trip
Trip Cycle Life	$V_{max}$ , $I_{max}$ , 100cycles	No arcing or burning
Trip Endurance	$V_{max}$ , 24hours	No arcing or burning

## Thermal Derating Chart

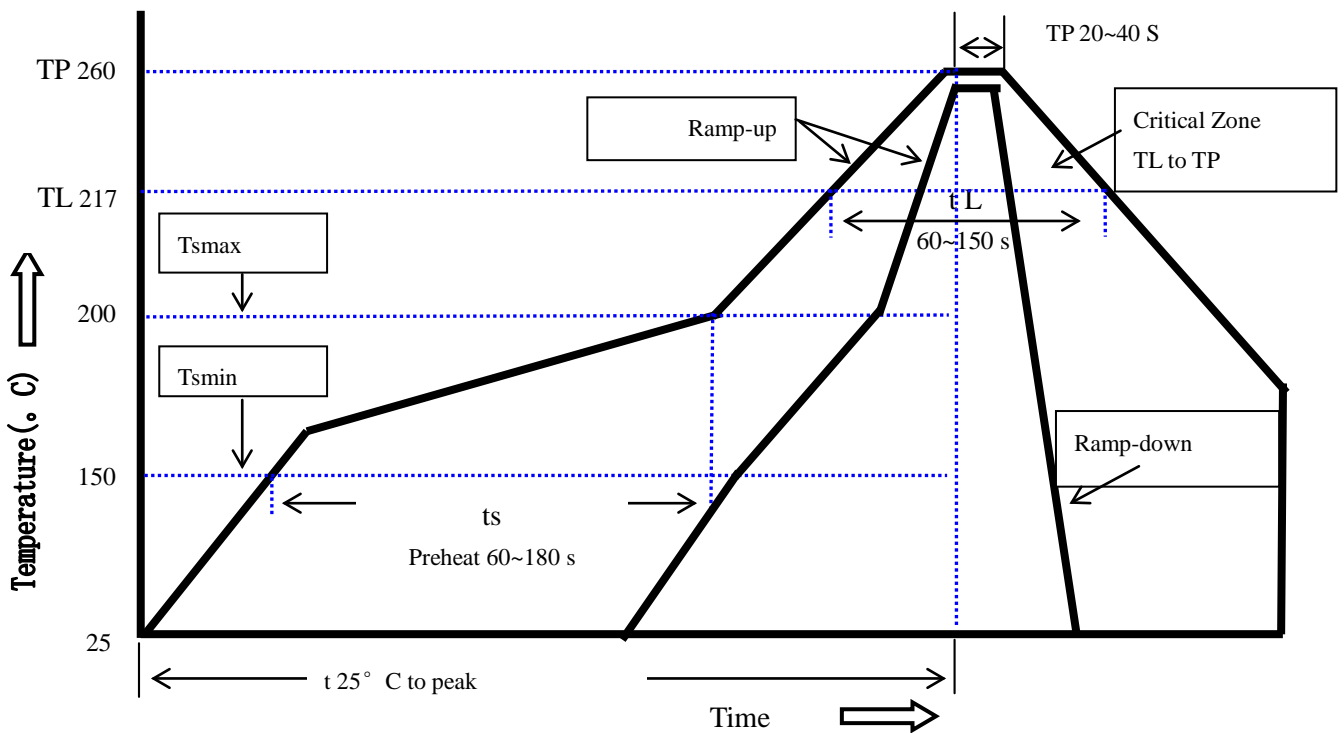
Recommended Hold Current (A) at Ambient Temperature (°C)

Part Number	Ambient Operation Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SMD2920C030SF	0.45	0.4	0.35	0.3	0.25	0.23	0.2	0.17	0.14
SMD2920C050SF	0.76	0.67	0.59	0.5	0.42	0.38	0.33	0.29	0.23
SMD2920C075SF	1.13	1.01	0.88	0.75	0.62	0.56	0.5	0.44	0.34
SMD2920C100SF	1.66	1.47	1.29	1.1	0.91	0.83	0.73	0.64	0.5
SMD2920C125SF	1.89	1.68	1.46	1.25	1.04	0.94	0.83	0.73	0.56
SMD2920C150SF	2.27	2.01	1.76	1.5	1.25	1.13	1	0.87	0.74
SMD2920C185SF	2.8	2.47	2.17	1.85	1.54	1.39	1.22	1.07	0.85
SMD2920C200SF	3.02	2.68	2.34	2	1.66	1.5	1.32	1.16	0.9
SMD2920C250SF	3.78	3.35	2.93	2.5	2.08	1.88	1.65	1.45	1.13
SMD2920C260SF	3.64	3.25	2.91	2.6	2.26	2.08	1.95	1.74	1.13
SMD2920C300SF	4.53	4.02	3.51	3	2.52	2.26	1.99	1.75	1.34
SMD2920C400SF	6.04	5.36	4.68	4	3.36	3.01	2.65	2.33	1.79
SMD2920C500SF	7.55	6.7	5.85	5	4.2	3.77	3.32	2.92	2.23
SMD2920C600SF	8.6	7.7	6.8	6	4.95	4.6	4.06	3.65	3.15

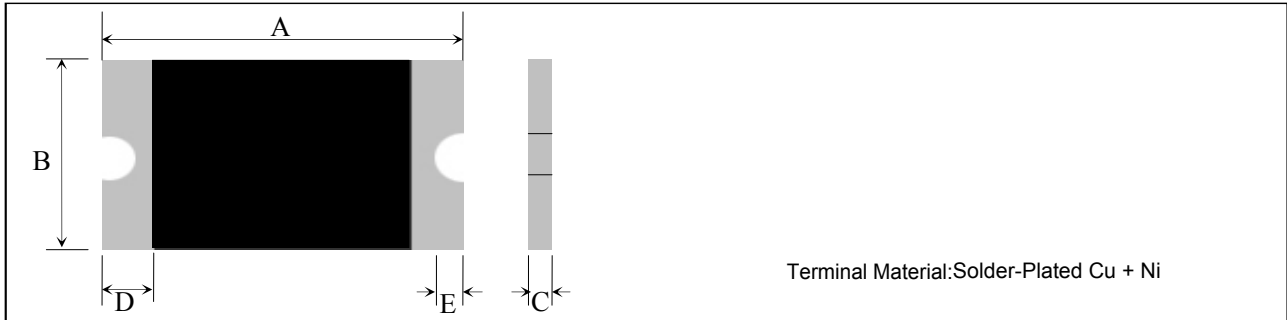
**Typical Characteristics**



**Solder Reflow Recommendations**



## Product Dimension



Part Number	A		B		C		D	E
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Min.
SMD2920C030SF60V	6.73	7.98	4.8	5.44	0.6	1.3	0.3	0.25
SMD2920C050SF60V	6.73	7.98	4.8	5.44	0.6	1.3	0.3	0.25
SMD2920C075SF33V/60V	6.73	7.98	4.8	5.44	0.6	1.3	0.3	0.25
SMD2920C100SF33V	6.73	7.98	4.8	5.44	0.4	1	0.3	0.25
SMD2920C125SF33V	6.73	7.98	4.8	5.44	0.4	0.9	0.3	0.25
SMD2920C150SF33V	6.73	7.98	4.8	5.44	0.4	0.9	0.3	0.25
SMD2920C185SF33V	6.73	7.98	4.8	5.44	0.3	0.9	0.3	0.25
SMD2920C200SF16V	6.73	7.98	4.8	5.44	0.3	0.9	0.3	0.25
SMD2920C250SF16V	6.73	7.98	4.8	5.44	0.3	0.9	0.3	0.25
SMD2920C260SF6V	6.73	7.98	4.8	5.44	0.3	0.9	0.3	0.25
SMD2920C300SF6V/16V	6.73	7.98	4.8	5.44	0.6	1.3	0.3	0.25
SMD2920C400SF16V	6.73	7.98	4.8	5.44	0.6	1.3	0.3	0.25
SMD2920C500SF6V	6.73	7.98	4.8	5.44	0.6	1.3	0.3	0.25
SMD2920C500SF12V	6.73	7.98	4.8	5.44	0.6	1.3	0.3	0.25
SMD2920C500SF16V	6.73	7.98	4.8	5.44	1	1.8	0.3	0.25
SMD2920C600SF6V	6.73	7.98	4.8	5.44	1	1.8	0.3	0.25

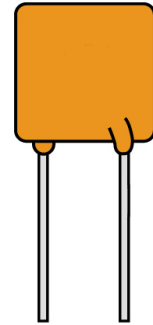
## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
SMD2920 Series	2920	Tape&Reel	1500pcs / Reel	EIA STD RS-481

## Polyswitch Resettable PTC in Single package

### Features

- Radial leaded devices
- Faster tripping, typical application in micro-motors for automobiles
- Protecting against overcurrent and overtemperature faults
- Available in lead-free version



### Applications

- Computer & peripherals
- USB hubs, ports and peripherals
- General electronics
- Medical equipments
- Transformers
- Motors

### Electrical Characteristics

Part Number	V <sub>max</sub> (V)	I <sub>max</sub> (A)	I <sub>hold</sub> (A)	I <sub>trip</sub> (A)	P <sub>d</sub> Typ (W)	Maximum Time To Trip		Resistance		
						Current (A)	Time (Sec)	R <sub>i</sub> min (Ω)	R <sub>i</sub> max (Ω)	R <sub>1</sub> max (Ω)
CPSR16-090	16	40	0.90	1.80	0.60	8.00	1.2	0.070	0.1200	0.180
CPSR16-110	16	40	1.10	2.20	0.70	8.00	2.3	0.050	0.0950	0.140
CPSR16-135	16	40	1.35	2.70	0.80	8.00	4.5	0.040	0.0740	0.120
CPSR16-160	16	40	1.60	3.20	0.90	8.00	9.0	0.030	0.0610	0.110
CPSR16-185	16	40	1.85	3.70	1.00	8.00	10.0	0.030	0.0510	0.090
CPSR16-250	16	40	2.50	5.00	1.20	12.50	5.0	0.020	0.0350	0.060
CPSR16-300	16	40	3.00	5.10	2.30	15.00	1.0	0.034	0.0650	0.105
CPSR16-400	16	40	4.00	6.80	2.40	20.00	1.7	0.020	0.0390	0.063
CPSR16-500	16	40	5.00	8.50	2.60	25.00	2.0	0.014	0.0230	0.044
CPSR16-600	16	40	6.00	10.20	2.80	30.00	3.3	0.009	0.0190	0.030
CPSR16-700	16	40	7.00	11.90	3.00	35.00	3.5	0.006	0.0130	0.021
CPSR16-800	16	40	8.00	13.60	3.00	40.00	5.0	0.005	0.0110	0.018
CPSR16-900	16	40	9.00	15.30	3.30	45.00	5.5	0.004	0.0092	0.015
CPSR16-1000	16	40	10.00	17.00	3.60	50.00	6.0	0.003	0.0071	0.012
CPSR16-1100	16	40	11.00	18.70	3.70	55.00	7.0	0.003	0.0062	0.010
CPSR16-1200	16	40	12.00	20.40	4.20	60.00	7.5	0.002	0.0060	0.009
CPSR16-1300	16	40	13.00	23.00	4.40	65.00	8.5	0.002	0.0060	0.009
CPSR16-1400	16	100	14.00	23.80	4.60	70.00	9.0	0.002	0.0045	0.008

$I_H$ =Hold current: maximum current at which the device will not trip at 25°C still air.

$I_T$ =Trip current: minimum current at which the device will always trip at 25°C still air.

$T_{trip}$ =Maximum time to trip at 5 times hold current (i.e.  $5 \cdot I_H$ ).

$V_{max}$ =Maximum voltage device can withstand without damage at rated current.

$I_{max}$ =Maximum fault current device can withstand without damage at rated voltage.

$P_d$ =Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

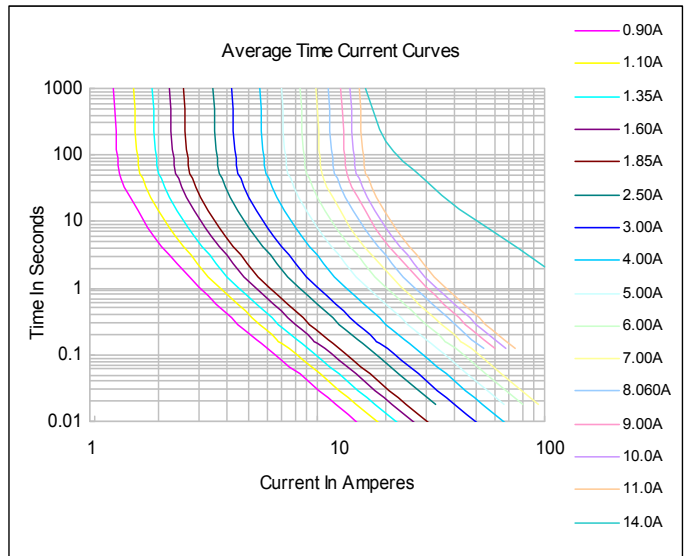
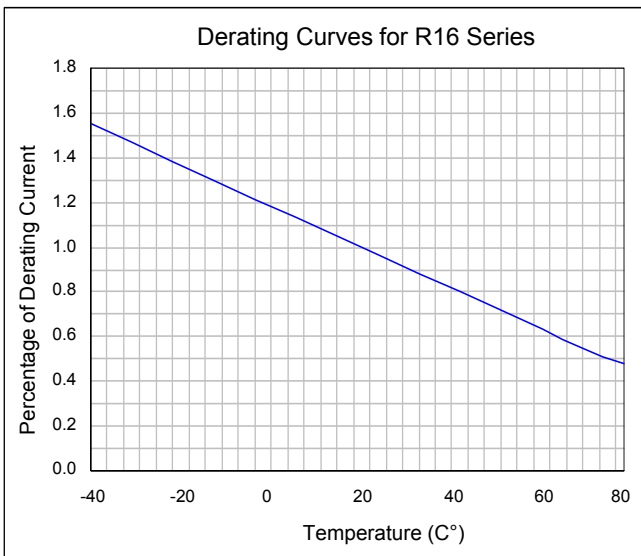
$R_{min}$ =Minimum device resistance at 25°C prior to tripping.

$R_{max}$ =Maximum resistance of device when measured one hour post trip at 25°C.

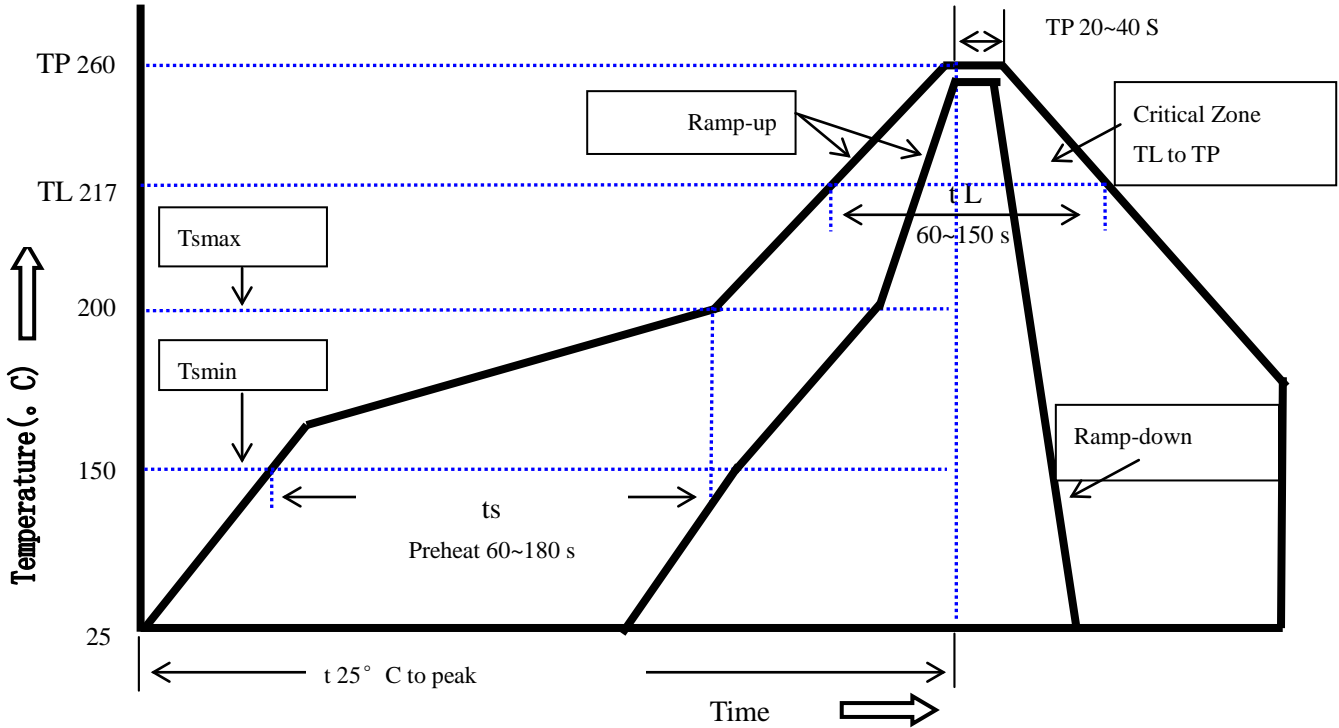
## Test Procedures And Requirements

Test	Test Conditions	Resistance change
Passive aging	+85°C, 1000 hrs.	±5% typical
Humidity aging	+85°C, 85% R.H. , 168 hours	±5% typical
Thermal shock	+85°C to -40°C, 20 times	±33% typical
Resistance to solvent	MIL-STD-202,Method 215	No change
Vibration	MIL-STD-202,Method 201	No change
Ambient operating conditions : - 40 °C to +85 °C		
Maximum surface temperature of the device in the tripped state is 125 °C		

## Typical Characteristics



## Solder Reflow Recommendations



Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate(Ts max to T p)	3°C/second max.
Preheat	
-Temperature Min(Ts min)	150°C
-Temperature Max(Ts max)	200°C
-Time(Ts min to Ts max)	60~180 seconds
Time maintained above:	
-Temperature(TL)	217°C
-Time(tL)	60~150 seconds
Peak Temperature(Tp)	260°C
Ramp-Down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max
Storage Condition	0°C~35°C, ≤70%RH

Recommended reflow methods: IR, vapor phase oven, hot air oven, N2 environment for lead-free

Recommended maximum paste thickness is 0.25mm

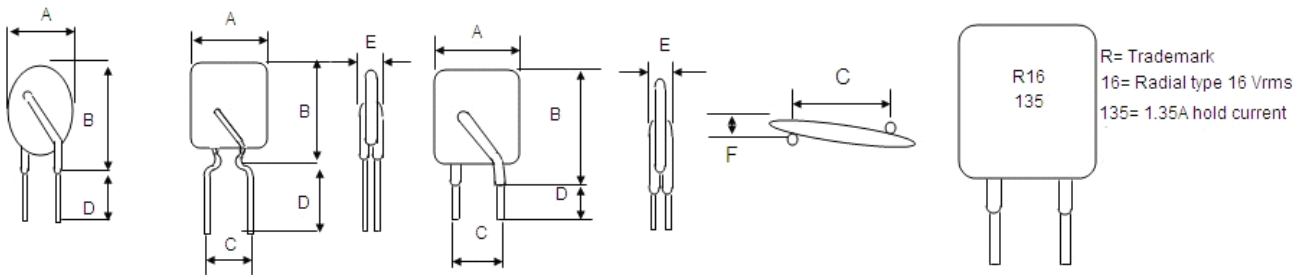
Devices can be cleaned using standard industry methods and solvents.

Note 1: All temperature refer to topside of the package, measured on the package body surface.

Note 2: If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.



## Product Dimension



Part Number	A Max.	B Max.	C Typ.	D Min.	E Max.	Lead Style
CPSR16-090	7.40	12.20	5.10	7.6	3	Kink
CPSR16-110	7.40	14.20	5.10	7.6	3	Kink
CPSR16-135	8.90	13.50	5.10	7.6	3	Kink
CPSR16-160	8.90	15.20	5.10	7.6	3	Kink
CPSR16-185	10.20	15.70	5.10	7.6	3	Kink
CPSR16-250	10.40	14.30	5.10	7.6	3	Kink
CPSR16-300	7.10	11.00	5.10	7.6	3	Straight
CPSR16-400	8.90	15.20	5.10	7.6	3	Straight
CPSR16-500	10.40	15.70	5.10	7.6	3	Straight
CPSR16-600	10.70	18.30	5.10	7.6	3	Straight
CPSR16-700	12.70	19.70	5.10	7.6	3	Straight
CPSR16-800	13.40	20.10	5.10	7.6	3	Straight
CPSR16-900	14.00	24.90	5.10	7.6	3	Straight
CPSR16-1000	16.50	24.90	5.10	7.6	3	Straight
CPSR16-1100	17.50	24.90	5.10	7.6	3	Straight
CPSR16-1200	18.50	26.70	10.20	7.6	3.5	Straight
CPSR16-1300	23.50	27.90	10.20	7.6	3.5	Straight
CPSR16-1400	23.50	27.90	10.20	7.6	3.5	Straight

### Physical Specifications:

Materials : Leads CPSR16-090~250 : Tin plated copper-clad steel, 24 AWG (0.51mm/0.020" Dia.)  
 CPSR16-300~1100 : Tin plated copper, 20 AWG (0.81mm/0.032" Dia.)  
 CPSR16-1200~1400 : Tin plated copper, 18 AWG (1.0mm/0.04" Dia.)

Lead Solderability : MIL-STD-202, Method 208E

Device Labeling : Device is marked with Logo, amperage rating , voltage rating & date code.

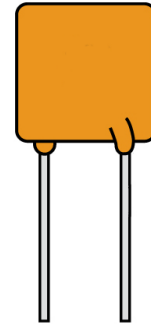
### Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CPSR16-x00			1000pcs / Bag	

## Polyswitch Resettable PTC in Single package

### Features

- Radial leaded devices
- Faster tripping, typical application in micro-motors for automobiles
- Protecting against overcurrent and overtemperature faults
- Available in lead-free version



### Applications

- Computer & peripherals
- USB hubs, ports and peripherals
- General electronics
- Medical equipments
- Transformers
- Motors

### Electrical Characteristics

Part Number	$V_{max}$	$I_{max}$	$I_{hold}$	$I_{trip}$	$P_d$	Maximum Time To Trip		Rimin	Rimax	R1max
	(Vdc)	(A)	(A)	(A)	(W)	Current(A)	Time(Sec)	( $\Omega$ )	( $\Omega$ )	( $\Omega$ )
CPSR30-030	30	40	0.3	0.6	0.44	8	0.3	0.37	0.72	1.08
CPSR30-040	30	40	0.4	0.8	0.45	8	0.3	0.25	0.43	0.645
CPSR30-050	30	40	0.5	1	0.46	8	0.3	0.15	0.4	0.6
CPSR30-065	30	40	0.65	1.3	0.47	8	0.4	0.12	0.3	0.45
CPSR30-075	30	40	0.75	1.5	0.48	8	0.4	0.1	0.25	0.375
CPSR30-090	30	40	0.9	1.8	0.6	4.5	5.9	0.07	0.145	0.22
CPSR30-110	30	40	1.1	2.2	0.7	5.5	6.6	0.05	0.12	0.17
CPSR30-135	30	40	1.35	2.7	0.8	6.75	7.3	0.04	0.085	0.13
CPSR30-160	30	40	1.6	3.2	0.9	8	8	0.03	0.07	0.11
CPSR30-185	30	40	1.85	3.7	1	9.25	8.7	0.03	0.06	0.09
CPSR30-250	30	40	2.5	5	1.2	12.5	10.3	0.02	0.04	0.07
CPSR30-300	30	40	3	6	2	15	10.8	0.02	0.05	0.08
CPSR30-400	30	40	4	8	2.5	20	12.7	0.01	0.03	0.05
CPSR30-500	30	40	5	10	3	25	14.5	0.01	0.03	0.05
CPSR30-600	30	40	6	12	3.5	30	16	0.005	0.02	0.04
CPSR30-700	30	40	7	14	3.8	35	17.5	0.005	0.02	0.03
CPSR30-800	30	40	8	16	4	40	18.8	0.005	0.02	0.02
CPSR30-900	30	40	9	18	4.2	40	20	0.005	0.01	0.02

$I_H$ =Hold current: maximum current at which the device will not trip at 25°C still air.

$I_T$ =Trip current: minimum current at which the device will always trip at 25°C still air.

$T_{trip}$ =Maximum time to trip at 5 times hold current (i.e.  $5 \cdot I_H$ ).

$V_{max}$ =Maximum voltage device can withstand without damage at rated current.

$I_{max}$ =Maximum fault current device can withstand without damage at rated voltage.

$P_d$ =Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

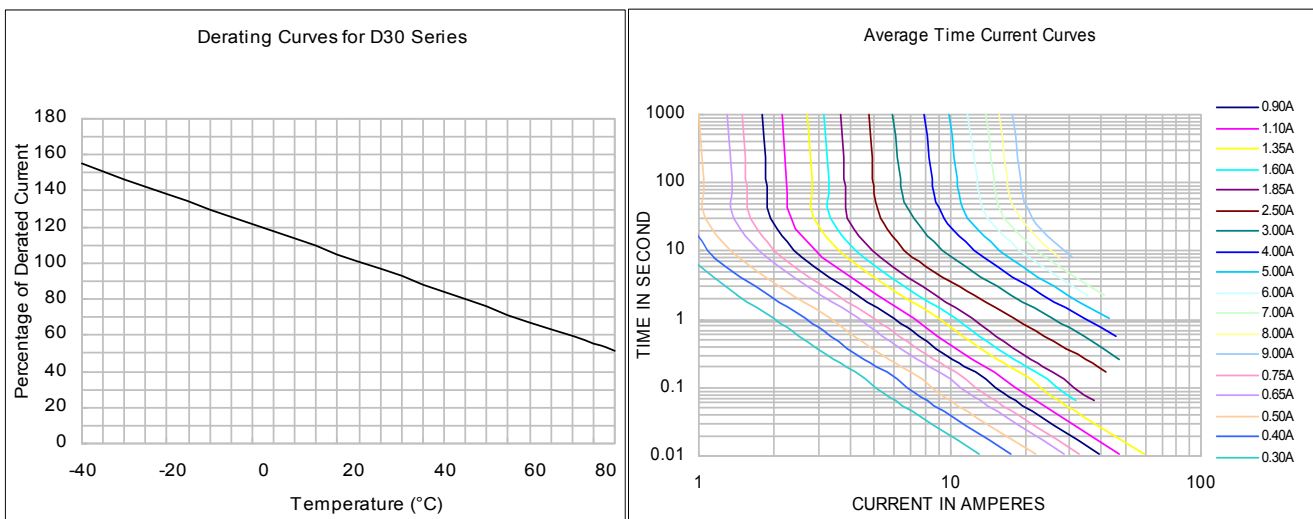
$R_{min}$ =Minimum device resistance at 25°C prior to tripping.

$R_{max}$ =Maximum resistance of device when measured one hour post trip at 25°C.

## Test Procedures And Requirements

Test	Test Conditions	Resistance change
Passive aging	+85°C, 1000 hrs.	±5% typical
Humidity aging	+85°C, 85% R.H. , 168 hours	±5% typical
Thermal shock	+85°C to -40°C, 20 times	±33% typical
Resistance to solvent	MIL-STD-202,Method 215	No change
Vibration	MIL-STD-202,Method 201	No change
Ambient operating conditions : - 40 °C to +85 °C		
Maximum surface temperature of the device in the tripped state is 125 °C		

## Typical Characteristics

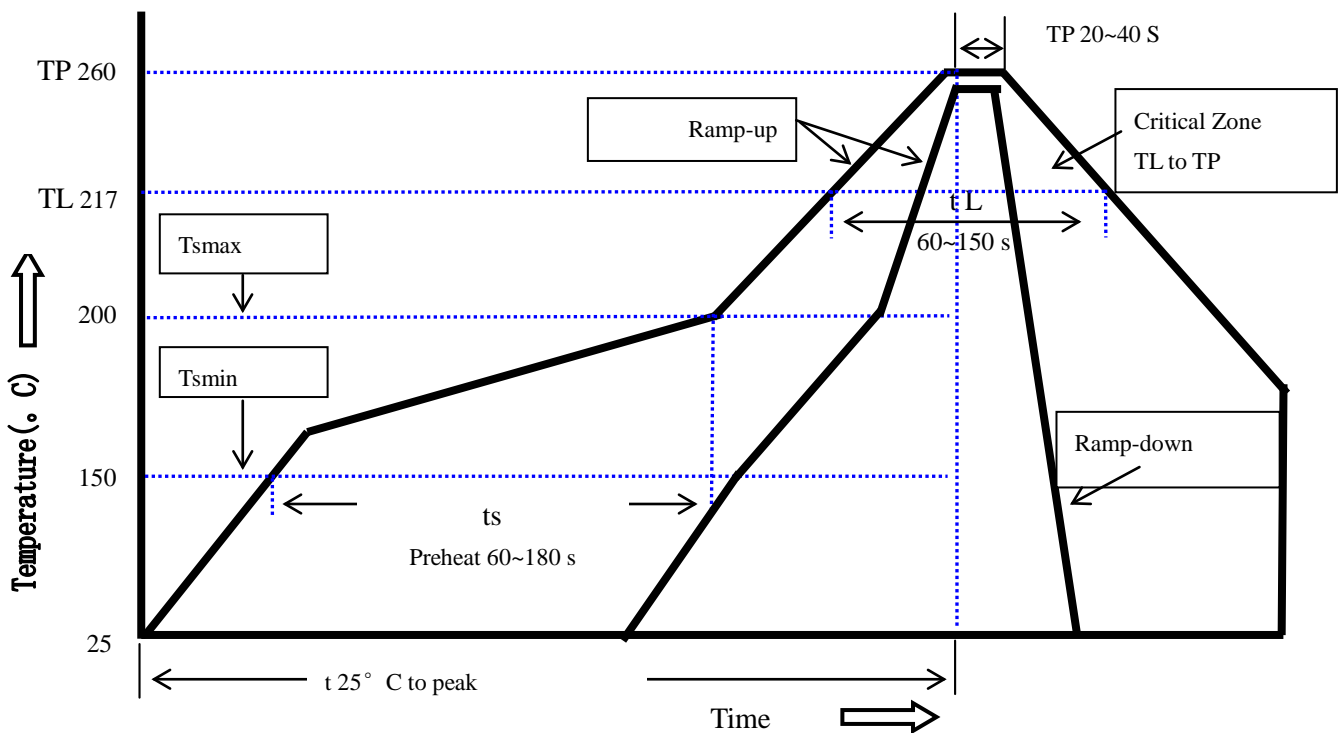


## Thermal Derating Chart

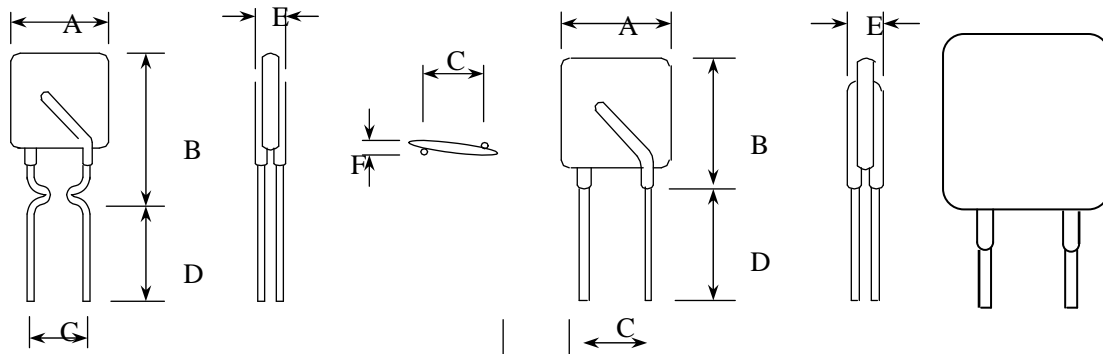
Recommended Hold Current (A) at Ambient Temperature (°C)

Part Number	Ambient Operation Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
CPSR30-030	0.44	0.39	0.35	0.3	0.25	0.23	0.2	0.18	0.16
CPSR30-040	0.58	0.52	0.46	0.4	0.33	0.31	0.27	0.24	0.21
CPSR30-050	0.73	0.65	0.58	0.5	0.42	0.38	0.34	0.31	0.26
CPSR30-065	0.95	0.85	0.75	0.65	0.54	0.5	0.44	0.4	0.34
CPSR30-075	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00
CPSR30-090	1.31	1.17	1.04	0.9	0.75	0.69	0.61	0.55	0.47
CPSR30-110	1.6	1.43	1.27	1.1	0.91	0.85	0.75	0.67	0.57
CPSR30-135	1.96	1.76	1.55	1.35	1.12	1.04	0.92	0.82	0.7
CPSR30-160	2.32	2.08	1.84	1.6	1.33	1.23	1.09	0.98	0.83
CPSR30-185	2.68	2.41	2.13	1.85	1.54	1.42	1.26	1.13	0.96
CPSR30-250	3.63	3.25	2.88	2.5	2.08	1.93	1.7	1.53	1.3
CPSR30-300	4.35	3.9	3.45	3	2.49	2.31	2.04	1.83	1.56
CPSR30-400	5.8	5.2	4.6	4	3.32	3.08	2.72	2.44	2.08
CPSR30-500	7.25	6.5	5.75	5	4.15	3.85	3.4	3.05	2.6
CPSR30-600	8.7	7.8	6.9	6	4.98	4.62	4.08	3.66	3.12
CPSR30-700	10.15	9.1	8.05	7	5.81	5.39	4.76	4.27	3.64
CPSR30-800	11.6	10.4	9.2	8	6.64	6.16	5.44	4.88	4.16
CPSR30-900	13.05	11.7	10.35	9	7.47	6.93	6.12	5.49	4.68

## Solder Reflow Recommendations



## Product Dimension



Part Number	A	B	C	D	E	F	Lead
	Max.	Max.	Typ.	Min.	Max.	Max.	Style
CPSR30-030	7.4/0.29	10.2/0.4	5.1/0.20	7.6/0.3	3.0/0.12	1.2/0.05	Straight
CPSR30-040	7.4/0.29	11.4/0.45	5.1/0.20	7.6/0.3	3.0/0.12	1.2/0.05	Straight
CPSR30-050	7.4/0.29	11.4/0.45	5.1/0.20	7.6/0.3	3.0/0.12	1.2/0.05	Straight
CPSR30-065	7.4/0.29	11.4/0.45	5.1/0.20	7.6/0.3	3.0/0.12	1.2/0.05	Straight
CPSR30-075	7.4/0.29	11.4/0.45	5.1/0.20	7.6/0.3	3.0/0.12	1.2/0.05	Straight
CPSR30-090	7.4/0.29	12.2/0.48	5.1/0.20	7.6/0.3	3.0/0.12	1.2/0.05	Kink
CPSR30-110	7.4/0.29	14.2/0.56	5.1/0.20	7.6/0.3	3.0/0.12	1.2/0.05	Kink
CPSR30-135	8.9/0.35	13.5/0.53	5.1/0.20	7.6/0.3	3.0/0.12	1.2/0.05	Kink
CPSR30-160	8.9/0.35	15.2/0.60	5.1/0.20	7.6/0.3	3.0/0.12	1.2/0.05	Kink
CPSR30-185	10.2/0.40	15.7/0.62	5.1/0.20	7.6/0.3	3.0/0.12	1.2/0.05	Kink
CPSR30-250	11.4/0.45	18.3/0.72	5.1/0.20	7.6/0.3	3.0/0.12	1.2/0.05	Kink
CPSR30-300	11.4/0.45	17.3/0.68	5.1/0.20	7.6/0.3	3.0/0.12	1.2/0.05	Straight
CPSR30-400	14.0/0.55	20.1/0.79	5.1/0.20	7.6/0.3	3.0/0.12	1.2/0.05	Straight
CPSR30-500	14.0/0.55	24.9/0.98	10.2/0.40	7.6/0.3	3.0/0.12	1.2/0.05	Straight
CPSR30-600	16.5/0.65	24.9/0.98	10.2/0.40	7.6/0.3	3.0/0.12	1.2/0.05	Straight
CPSR30-700	19.1/0.75	26.7/1.05	10.2/0.40	7.6/0.3	3.0/0.12	2.0/0.08	Straight
CPSR30-800	21.6/0.85	29.2/1.15	10.2/0.40	7.6/0.3	3.0/0.12	2.0/0.08	Straight
CPSR30-900	24.1/0.95	29.7/1.17	10.2/0.40	7.6/0.3	3.0/0.12	2.0/0.08	Straight

### Physical Specifications:

Materials : Leads CPSR16-090~250 : Tin plated copper-clad steel, 24 AWG (0.51mm/0.020" Dia.)  
 CPSR16-300~1100 : Tin plated copper, 20 AWG (0.81mm/0.032" Dia.)  
 CPSR16-1200~1400 : Tin plated copper, 18 AWG (1.0mm/0.04" Dia.)

Lead Solderability : MIL-STD-202, Method 208E

Device Labeling : Device is marked with Logo, amperage rating , voltage rating & date code.

## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CPSR30-x00			1000pcs / Bag	

## Polyswitch Resettable PTC in Single package

### Features

- Radial leaded devices
- Faster tripping, typical application in micro-motors for automobiles
- Protecting against overcurrent and overtemperature faults
- Available in lead-free version

### Applications

- Computer & peripherals
- USB hubs, ports and peripherals
- General electronics
- Medical equipments
- Transformers
- Motors



### Electrical Characteristics

Part Number	V <sub>max</sub>	I <sub>max</sub>	I <sub>hold</sub>	I <sub>trip</sub>	P <sub>d</sub>	Maximum Time TO Trip		R <sub>imin</sub>	R <sub>imax</sub>	R <sub>1max</sub>
	(Vdc)	(A)	(A)	(A)	(W)	Current(A)	Time(Sec)	(Ω)	(Ω)	(Ω)
CPSR60-005	60	40	0.05	0.1	0.3	0.25	5	16	26	30
CPSR60-010	60	40	0.1	0.2	0.38	0.5	4	2.5	4.5	6
CPSR60-017	60	40	0.17	0.34	0.48	0.85	3	2	3.2	4.5
CPSR60-020	60	40	0.2	0.4	0.41	1	2.2	1.5	2.84	3.8
CPSR60-025	60	40	0.25	0.5	0.45	1.25	2.5	1	1.95	2.8
CPSR60-030	60	40	0.3	0.6	0.49	1.5	3	0.76	1.36	1.8
CPSR60-040	60	40	0.4	0.8	0.56	2	3.8	0.52	0.86	1.1
CPSR60-050	60	40	0.5	1	0.77	2.5	4	0.41	0.77	1
CPSR60-065	60	40	0.65	1.3	0.88	3.25	5.3	0.27	0.48	0.6
CPSR60-075	60	40	0.75	1.5	0.92	3.75	6.3	0.28	0.4	0.63
CPSR60-090	60	40	0.9	1.8	0.99	4.5	7.2	0.14	0.31	0.42
CPSR60-110	60	40	1.1	2.2	1.5	5.5	8.2	0.14	0.25	0.33
CPSR60-135	60	40	1.35	2.7	1.7	6.75	9.6	0.12	0.19	0.26
CPSR60-160	60	40	1.6	3.2	1.9	8	11.4	0.09	0.14	0.19
CPSR60-185	60	40	1.85	3.7	2.1	9.25	12.6	0.08	0.12	0.16
CPSR60-250	60	40	2.5	5	2.5	12.5	15.6	0.05	0.09	0.13
CPSR60-300	60	40	3	6	2.8	15	19.8	0.04	0.06	0.09
CPSR60-375	60	40	3.75	7.5	3.2	18.75	24	0.03	0.05	0.08
CPSR60-400	60	40	4	8	3.2	20	20	0.014	0.038	0.06

$I_H$ =Hold current: maximum current at which the device will not trip at 25°C still air.

$I_T$ =Trip current: minimum current at which the device will always trip at 25°C still air.

$T_{trip}$ =Maximum time to trip at 5 times hold current (i.e.  $5 \cdot I_H$ ).

$V_{max}$ =Maximum voltage device can withstand without damage at rated current.

$I_{max}$ =Maximum fault current device can withstand without damage at rated voltage.

$P_d$ =Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

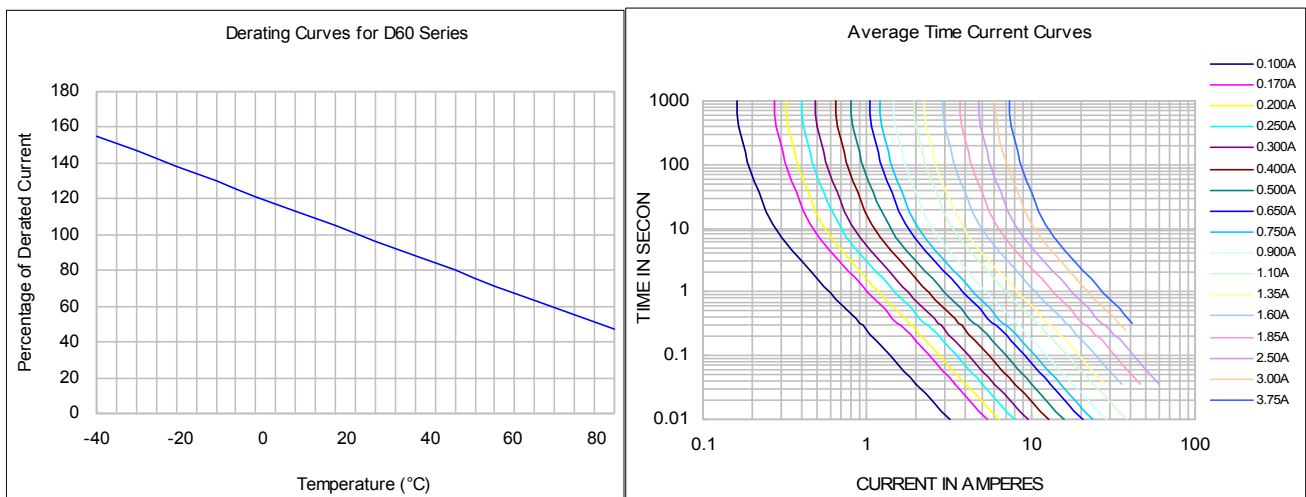
$R_{min}$ =Minimum device resistance at 25°C prior to tripping.

$R_{max}$ =Maximum resistance of device when measured one hour post trip at 25°C.

## Test Procedures And Requirements

Test	Test Conditions	Resistance change
Passive aging	+85°C, 1000 hrs.	±5% typical
Humidity aging	+85°C, 85% R.H. , 168 hours	±5% typical
Thermal shock	+85°C to -40°C, 20 times	±33% typical
Resistance to solvent	MIL-STD-202,Method 215	No change
Vibration	MIL-STD-202,Method 201	No change
Ambient operating conditions : - 40 °C to +85 °C		
Maximum surface temperature of the device in the tripped state is 125 °C		

## Typical Characteristics

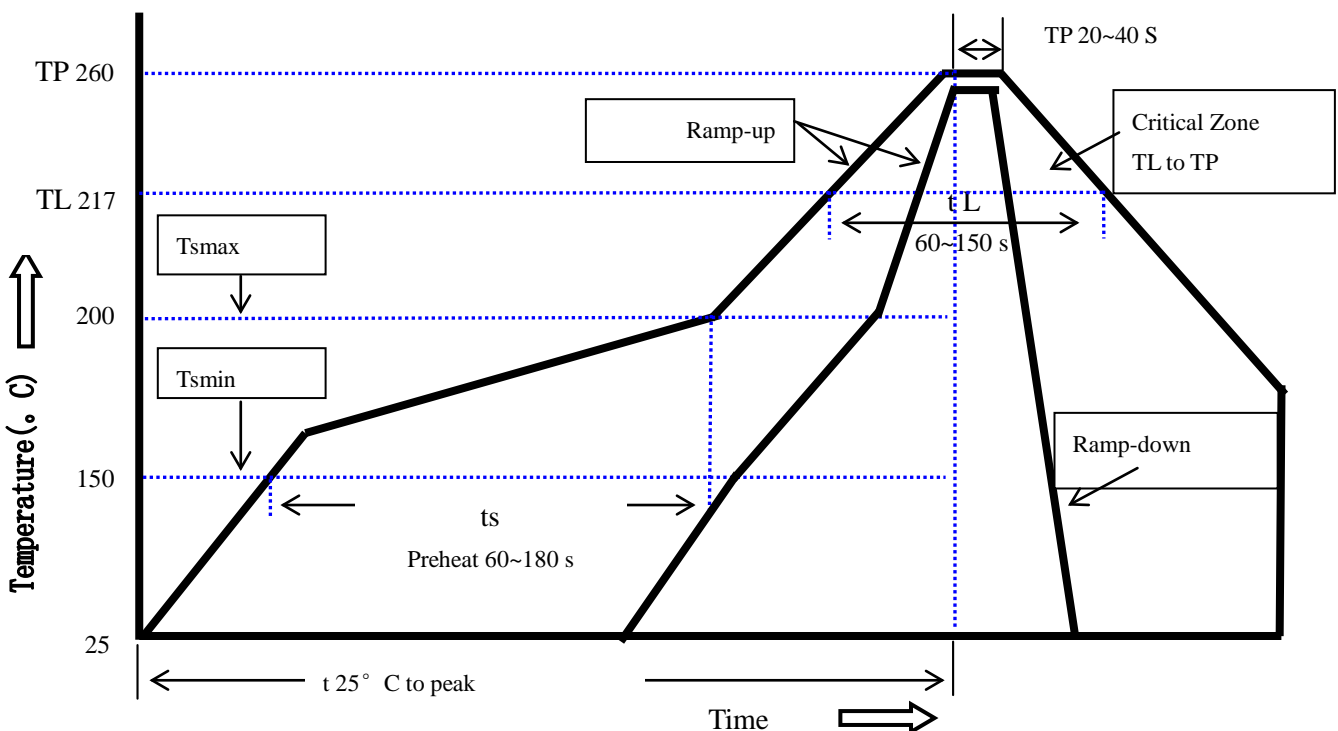


## Thermal Derating Chart

Recommended Hold Current (A) at Ambient Temperature (°C)

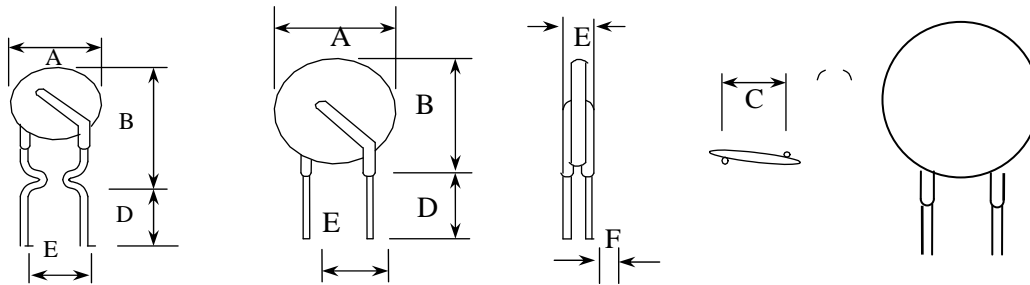
Part Number	Ambient Operation Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
CPSR60-005	0.08	0.07	0.06	0.05	0.04	0.035	0.03	0.025	0.02
CPSR60-010	0.16	0.14	0.12	0.1	0.08	0.07	0.06	0.05	0.04
CPSR60-017	0.26	0.23	0.2	0.17	0.14	0.12	0.11	0.09	0.07
CPSR60-020	0.31	0.27	0.24	0.2	0.16	0.14	0.13	0.11	0.08
CPSR60-025	0.39	0.34	0.3	0.25	0.2	0.18	0.16	0.14	0.1
CPSR60-030	0.47	0.41	0.36	0.3	0.24	0.22	0.19	0.16	0.12
CPSR60-040	0.62	0.54	0.48	0.4	0.32	0.29	0.25	0.22	0.16
CPSR60-050	0.78	0.68	0.6	0.5	0.41	0.36	0.32	0.27	0.2
CPSR60-065	1.01	0.88	0.77	0.65	0.53	0.47	0.41	0.35	0.26
CPSR60-075	1.16	1.02	0.89	0.75	0.61	0.54	0.47	0.41	0.3
CPSR60-090	1.4	1.22	1.07	0.9	0.73	0.65	0.57	0.49	0.36
CPSR60-110	1.71	1.5	1.31	1.1	0.89	0.79	0.69	0.59	0.44
CPSR60-135	2.09	1.84	1.61	1.35	1.09	0.97	0.85	0.73	0.54
CPSR60-160	2.48	2.18	1.9	1.6	1.3	1.15	1.01	0.86	0.64
CPSR60-185	2.87	2.52	2.2	1.85	1.5	1.33	1.17	1	0.74
CPSR60-250	3.88	3.4	2.98	2.5	2.03	1.8	1.58	1.35	1
CPSR60-300	4.65	4.08	3.57	3	2.43	2.16	1.89	1.62	1.2
CPSR60-375	5.81	5.1	4.46	3.75	3.04	2.7	2.36	2.03	1.5
CPSR60-400	6.2	5.44	4.76	4	3.24	2.88	2.52	2.16	1.6

## Solder Reflow Recommendations





## Product Dimension



Part Number	A	B	C	D	E
	Max.	Max.	Typ.	Min.	Max.
CPSR60-005	5.7	10.5	3.1	7.6	5.1
CPSR60-010	5.7	10.5	3.1	7.6	5.1
CPSR60-017	5.9	11.2	3.1	7.6	5.1
CPSR60-020	5.9	11.2	3.1	7.6	5.1
CPSR60-025	6.1	11.4	3.1	7.6	5.1
CPSR60-030	7.6	13.4	3.1	7.6	5.1
CPSR60-040	7.7	13.6	3.1	7.6	5.1
CPSR60-050	7.9	13.7	3.1	7.6	5.1
CPSR60-065	9.7	14.5	3.1	7.6	5.1
CPSR60-075	10.7	15.5	3.1	7.6	5.1
CPSR60-090	11.7	16.5	3.1	7.6	5.1
CPSR60-110	13	16.7	3.1	7.6	5.1
CPSR60-135	15.7	17.6	3.1	7.6	5.1
CPSR60-160	16.7	19.7	3.1	7.6	5.1
CPSR60-185	17.8	22.9	3.1	7.6	5.1
CPSR60-250	21.3	23.5	3.1	7.6	10.2
CPSR60-300	24.9	27.4	3.1	7.6	10.2
CPSR60-375	28.5	32.5	3.1	7.6	10.2
CPSR60-400	21.0	26.0	3.1	7.6	10.2

### Physical Specifications:

Materials : Leads CPSR16-090~250 : Tin plated copper-clad steel, 24 AWG (0.51mm/0.020" Dia.)

CPSR16-300~1100 : Tin plated copper, 20 AWG (0.81mm/0.032" Dia.)

CPSR16-1200~1400 : Tin plated copper, 18 AWG (1.0mm/0.04" Dia.)

Lead Solderability : MIL-STD-202, Method 208E

Device Labeling : Device is marked with Logo, amperage rating , voltage rating & date code.

## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CPSR60-x00			500pcs / Bag	