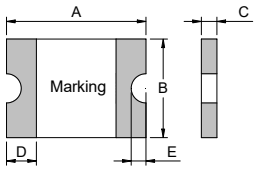
SMD1206P050TF/30HQ

Surface Mount PPTC Devices

Product Dimensions(mm) (size of 1206)

Model	A		B		C		D	E	Marking
	Min	Max	Min	Max	Min	Max	Min	Min	
SMD1206P050TF/30HQ	3.00	3.40	1.40	1.80	0.70	1.35	0.25	0.10	H05



Electrical Characteristics

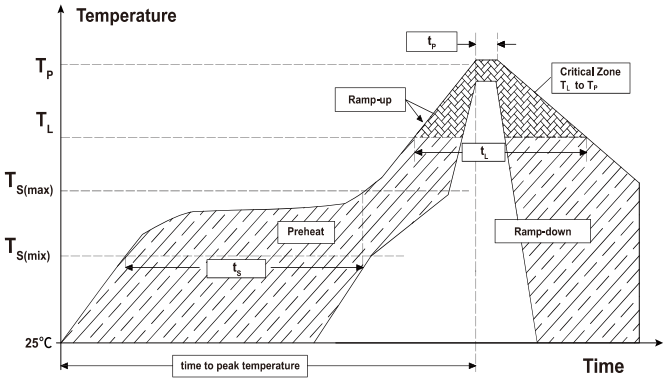
Model	I-hold	I-trip	Vmax	Imax	Pd typ	Max. Time to trip		R0 min	R1max
						Current	Time		
	(A)	(A)	(Vdc)	(A)	(W)	(A)	(Sec.)	(Ohm)	(Ohm)
SMD1206P050TF/30HQ	0.50	2.00	30.00	40.00	1.50	8.00	0.10	0.150	1.10

Thermal Derating

Recommended hold current(A) at ambient Temperature(℃)

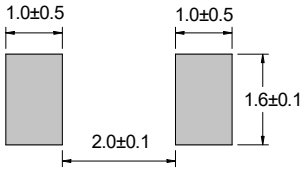
SMD1206P050TF/30HQ	Maximum ambient operating temperature										
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃	100℃	125℃
Hold current (A)	0.76	0.68	0.59	0.50	0.44	0.40	0.35	0.32	0.26	0.21	0.16
Trip current (A)	3.04	2.72	2.36	2.00	1.76	1.60	1.40	1.28	1.04	0.84	0.64

Soldering parameters



Reflow Profile	Lead free
Heating rate from Tsmax to Tp	Max.3℃/second
Pre-heat: Tsmin Tsmax Tsmin to Tsmax	 150℃ 200℃ 60~180seconds
Soldering time: Temperature（TL） Time（tL）	>217℃ 60~150seconds
Peak temperature（Tp）	260℃
Time at Peak temperature ±5	20~40seconds

Recommended Pad Layout(mm) & Physical Specifications



Terminal Material	Tin-Plated Nickle-Copper (Solder Material: Matte Tin (Sn))
Lead Solderability	Meets EIA Specification RS186-9E, ANSI/J-STD-002 Category 3.

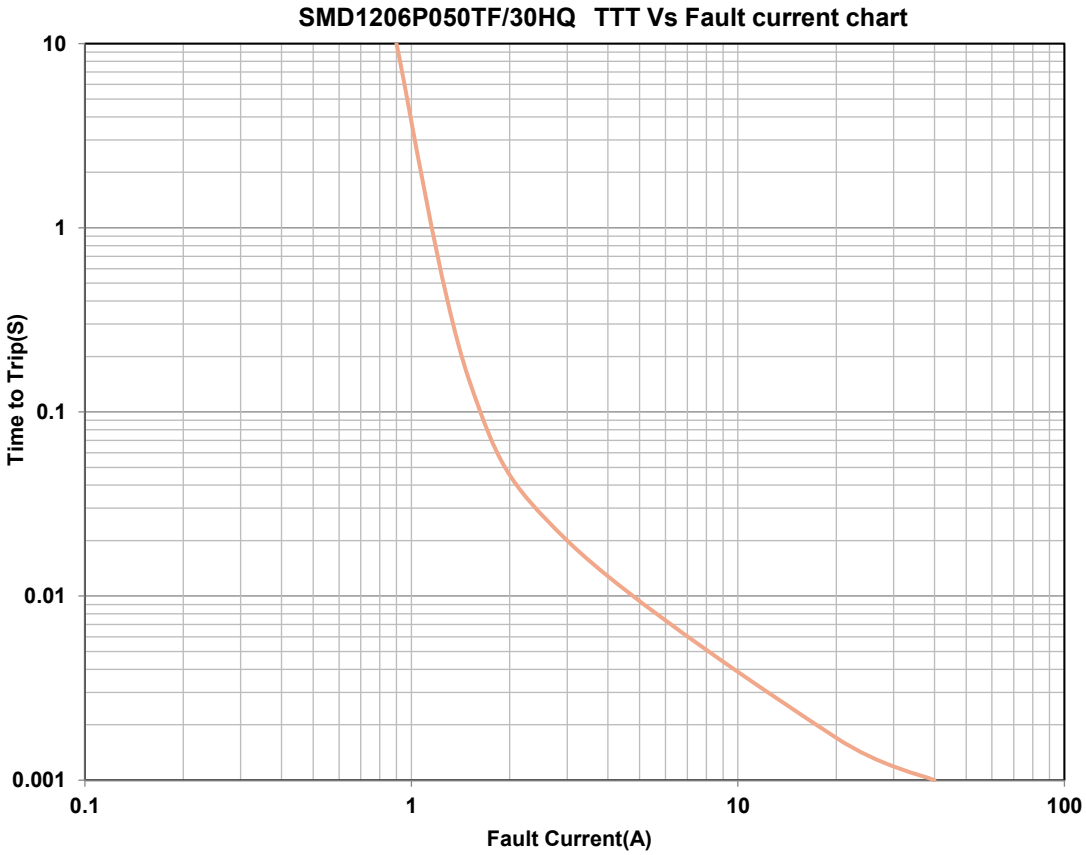
Package Information

Tape & Reel: 3500pcs/Reel.

Note: Reel packaging per EIA-481-1 standard

AEC-Q200 qualified

Typical time to trip at 25℃



Storage

The maximum ambient temperature shall not exceed 38℃. Storage temperatures higher than 38℃ could result in the deformation of packaging materials. The maximum relative humidity recommended for storage is 60%. High humidity with high temperature can accelerate the oxidation of the solder plating on the termination and reduce the solderability of the components. Sealed plastic bags with desiccant shall be used to reduce the oxidation of the termination and shall only be opened prior to use. The products shall not be stored in areas where harmful gases containing sulfur or chlorine are present

WARNING

· Use PPTC beyond the maximum ratings or improper use may result in device damage and possible electrical arcing and flame.

· PPTC are intended for protection against occasional over current or over temperature fault conditions and should not be used when repeated fault conditions or prolonged trip events are anticipated.

· Device performance can be impacted negatively if devices are handled in a manner inconsistent with recommended electronic, thermal, and mechanical procedures for electronic components.

· Use PPTC with a large inductance in circuit will generate a circuit voltage (L di/dt) above the rated voltage of the PPTC.

· Avoid impact PPTC device its thermal expansion like placed under pressure or installed in limited space.

· Contamination of the PPTC material with certain silicon based oils or some aggressive solvents can adversely impact the performance of the devices.PPTC SMD can be cleaned by standard methods.

· Requests that customers comply with our recommended solder pad layouts and recommended reflow profile. Improper board layouts or reflow profilecould negatively impact solderability performance of our devices.

NOTICE

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