

HSMD1206 Series

Surface Mount PPTC Devices

Application:

- Portable electronic devices
- Computer motherboard
- Game console port protection
- USB port protection

Features:

- Surface mount devices
- 1206 Dimension
- Small size to save board space
- Sensitive to the fault current
- RoHS compliant and lead-free

1. Electrical Characteristics (23°C)

Part Number	Hold Current $I_H(A)$	Trip Current $I_T(A)$	Rated Voltage $V_{MAX}(V)$	Max. Current $I_{MAX}(A)$	Typical Power Pd(W)	Max. Time To Trip		Resistance(Ω)	
						Current(A)	Time(Sec.)	R_{MIN}	R_{1MAX}
HSMD1206-005/60	0.05	0.15	60	10	0.4	1.50	0.25	3.600	50.000
HSMD1206-010/60	0.10	0.25	60	10	0.4	1.00	0.50	1.600	15.000
HSMD1206-012/30	0.12	0.29	30	40	0.6	1.00	0.20	1.500	6.000
HSMD1206-016/30	0.16	0.37	30	40	0.6	1.00	0.30	1.250	4.500
HSMD1206-020/30	0.20	0.40	30	40	0.4	8.00	0.10	0.600	2.500
HSMD1206-025/16	0.25	0.50	16	100	0.6	8.00	0.08	0.550	2.300
HSMD1206-035/16	0.35	0.70	16	100	0.6	8.00	0.10	0.300	1.200
HSMD1206-050/16	0.50	1.00	16	100	0.6	8.00	0.10	0.150	0.750
HSMD1206-050/8	0.50	1.00	8	100	0.6	8.00	0.10	0.150	0.700
HSMD1206-075/16	0.75	1.50	16	100	0.6	8.00	0.20	0.090	0.350
HSMD1206-075/8	0.75	1.50	8	100	0.6	8.00	0.20	0.090	0.290
HSMD1206-110/8	1.10	2.20	8	100	0.8	8.00	0.30	0.040	0.250
HSMD1206-150/8	1.50	3.00	6	100	0.8	8.00	0.30	0.040	0.140

I_H = Hold Current: maximum current at which the Devices will not trip at 23°C still air.

V_{MAX} =Maximum voltage Devices can withstand without damage at rated current.

Pd= Typical power dissipation from Devices when in the tripped stated at 23°C still air.

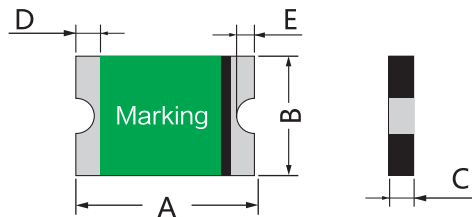
R_{1MAX} = Maximum Devices resistance at 23°C measured one hour after reflow soldering.

I_T = Trip Current: minimum current at which at which the Devices will always trip at 23°C still air.

I_{MAX} = Maximum fault current Devices can withstand without damage at rated current.

R_{MIN} = Minimum resistance of Devices in initial (un-solder) state.

2. Product Dimensions and Marking (mm)

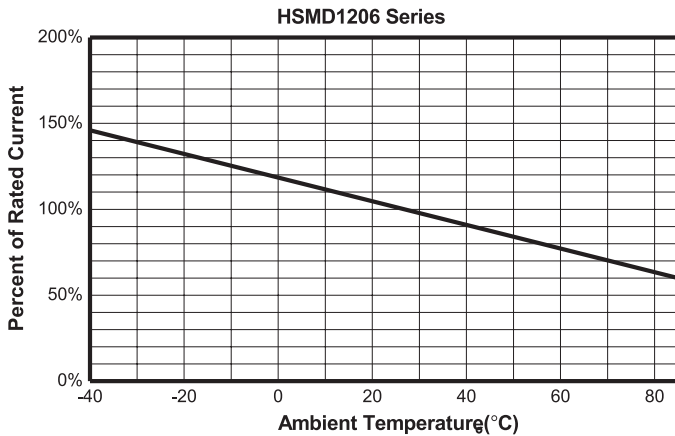


Part Number	A		B		C		D		E	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
HSMD1206-005/60	3.00	3.50	1.50	1.80	0.40	0.85	0.10	0.75	0.10	0.45
HSMD1206-010/60	3.00	3.50	1.50	1.80	0.40	0.85	0.10	0.75	0.10	0.45
HSMD1206-012/30	3.00	3.50	1.50	1.80	0.40	0.75	0.10	0.75	0.10	0.45
HSMD1206-016/30	3.00	3.50	1.50	1.80	0.40	0.75	0.10	0.75	0.10	0.45
HSMD1206-020/30	3.00	3.50	1.50	1.80	0.25	0.75	0.10	0.75	0.10	0.45
HSMD1206-025/16	3.00	3.50	1.50	1.80	0.40	1.00	0.25	0.75	0.10	0.45
HSMD1206-035/16	3.00	3.50	1.50	1.80	0.30	0.75	0.25	0.75	0.10	0.45
HSMD1206-050/16	3.00	3.50	1.50	1.80	0.25	0.75	0.25	0.75	0.10	0.45
HSMD1206-050/8	3.00	3.50	1.50	1.80	0.30	0.75	0.25	0.75	0.10	0.45
HSMD1206-075/16	3.00	3.50	1.50	1.80	0.45	1.35	0.25	0.75	0.10	0.45
HSMD1206-075/8	3.00	3.50	1.50	1.80	0.45	1.25	0.25	0.75	0.10	0.45
HSMD1206-110/8	3.00	3.50	1.50	1.80	0.45	1.35	0.25	0.75	0.10	0.45
HSMD1206-150/8	3.00	3.50	1.50	1.80	0.85	1.50	0.25	0.75	0.10	0.45

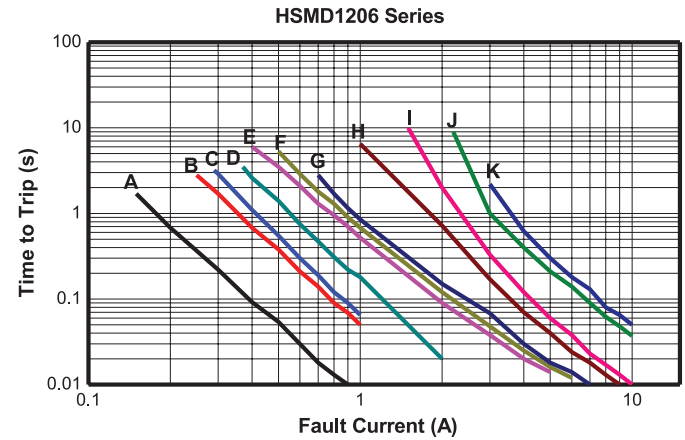
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3. Thermal Derating Curve



4. Typical Time to Trip at 23°C

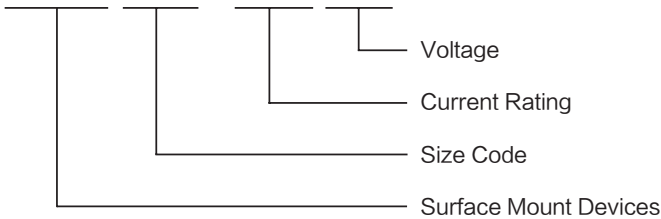


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|--------------------|----------------------|
| A= HSMD1206-005/60 | G= HSMD1206-035/16 |
| B= HSMD1206-010/60 | H= HSMD1206-050/16, |
| C= HSMD1206-012/30 | HSMD1206-050/8 |
| D= HSMD1206-016/30 | I = HSMD1206-075/16, |
| E= HSMD1206-020/30 | HSMD1206-075/8 |
| F= HSMD1206-025/16 | J = HSMD1206-110/8 |
| | K= HSMD1206-150/8 |

5. Part Number and Marking System

Part Numbering System

HSMD 1206 - XXX / XX



6. Packing

HSMD1206-005/60 ~ HSMD1206-050/8 : 4000 Reel/Tape

HSMD1206-075/16 ~ HSMD1206-150/6: 3000 Reel/Tape

NOTE:

For Pad Layout, Major Test Items, Requirement, Physical Specifications, Solder Reflow and Tape and Reel Specifications, please refer to the Appendix.