PROSEMI
Circuit Protection

Fast Acting | 0.126x0.064 inch Thick Film Chip Fuses

1206HV Series

1206HV Series are the fuses set the industry standard for performance, reliability and quality. The solder-free design provides excellent on-off and temperature cycling characteristics during use and also makes our SMD fuses more heat and shock tolerant than typical subminiature fuses.

Features

- Compatible with reflow and wave solder
- Ceramic and glass construction
- Halogen free, lead free and RoHS compliant
- Excellent environmental integrity
- One time positive disconnect
- AEC-Q200 Automotive Grade Certified

Appications

- Flat panel displays and televisions
- Automotive infotainment and ECU
- Computer servers
- Portable electronics
- Mobile device chargers
- Power Battery Packs

Electrical Characteristics

Amp Rating	% of Amp Rating	Opening Time
0.25~5A	100%	4 Hours Min.
	250%	5 Seconds Max.

Specification

Part Number	Ampere Rating (A)	Voltage Rating (V)	Interrupting Rating	Typical Cold Resistance (Ohms)	Typical Melting I^2t (A^2Sec)	Typical Voltage Drop (V)	Marking Code
1206HV-R250	0.250	125Vac/dc	50A	3.598	0.02	1.406	.25
1206HV-R375	0.375	125Vac/dc	50A	1.875	0.13	0.717	E
1206HV-R500	0.500	125Vac/dc	50A	1.019	0.18	0.670	0.5
1206HV-R750	0.750	125Vac/dc	50A	0.790	0.43	0.988	.75
1206HV-1A	1.00	125Vac/dc	50A	0.270	0.69	0.305	H
1206HV-1.25A	1.25	125Vac/dc	50A	0.169	1.7	0.283	-
1206HV-1.5A	1.50	125Vac/dc	50A	0.123	2.3	0.261	1.5
1206HV-2A	2.00	125Vdc	50A	0.081	3.1	0.199	N
1206HV-2.5A	2.50	125Vdc	50A	0.035	3.9	0.136	2.5
1206HV-3A	3.00	125Vdc	50A	0.031	5	0.131	P
1206HV-3.5A	3.50	72Vdc	50A	0.024	12.2	0.135	3.5
1206HV-4A	4.00	72Vdc	50A	0.019	15	0.120	S
1206HV-5A	5.00	72Vdc	50A	0.016	17	0.099	T

- DC Interrupting Rating - Measured at designated voltage, time constant < 50 microseconds.
- DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C.
- Typical Melting I^2t measured at 10In Current.
- Typical Voltage Drop measured at rated current after temperature has stabilized.

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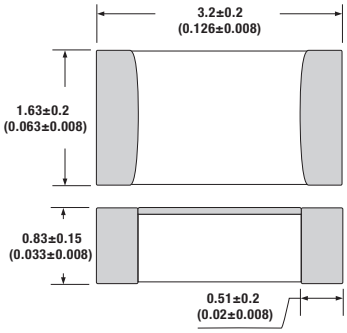
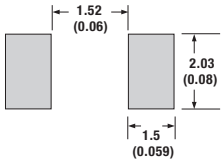
Dimension

Unit: mm/inch



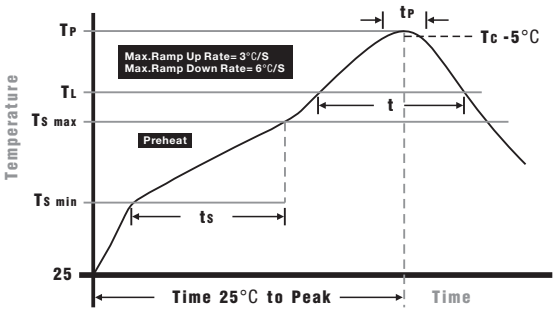
Pad layout



Packaging

- Quantity: 3,000pcs
- 8mm wide tape on 178mm(7 inch) diameter reel -specification EIA Standard 481.

Soldering Parameters

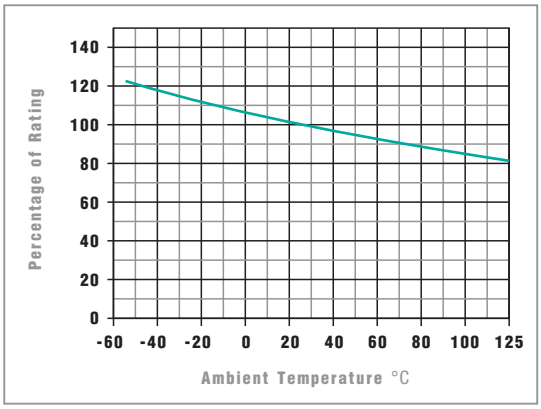


Wave Soldering: 260°C, 10 seconds max.
Infrared Reflow: 260°C, 30 seconds max.

IR Reflow Profile

Preheat Heat **Temperature min (Tsmin)** **Temperature max(Tsmax)** **Time (Tsmin to Tsmax) (ts)**	 150°C 200°C 60 -120 seconds
Average ramp-up rate (Tsmax to Tp)	3°C/second max.
Liquidous temperature (T_L) **Time at liquidous (t_L)**	217°C 60 - 150 seconds
Peak temperature(Tp)	260+0/-5°C
Time within 5°C of actual peak Temperature (tp)	10 – 30 seconds
Average ramp-down rate (Tp to Tsmax)	6°C/second max.
Time 25 °C to peak temperature	8 minutes max.

Temperature Derating Curve



- Normal Operating Temperature: 23°C± 2
- Operating T emperature: -55 to 125°C
- The fuse rating is determined by the equation below:

$$I_n = \frac{I_{input\ max.}}{0.70 \times K_{temp}}$$

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Average Time Current Curves