PROSEMI
Circuit Protection

Surface-Mount Devices | 1206 Size

PTC Resettable Fuses

SRF1206 Series

Features

- Compact design saves board space
- Fast response to fault currents
- Compatible with high temperature solders
- Low resistance
- Low-profile
- RoHS compliant, lead-free and halogen-free

Applications

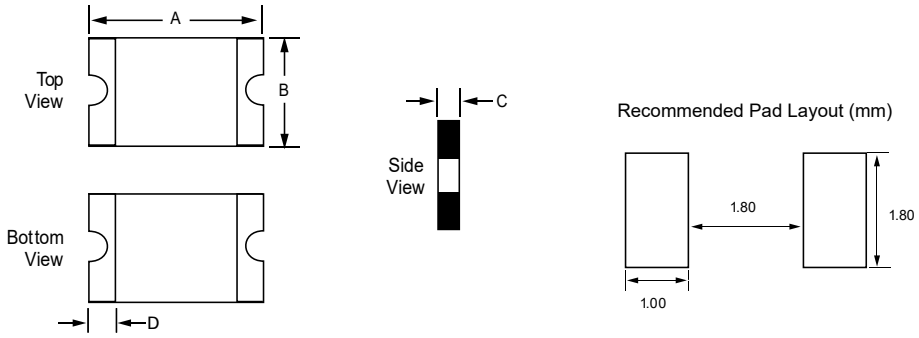
- Computer
- Portable electronics
- Multimedia
- Game machines
- Telephony and broadband
- Mobile phones
- Automotive
- Industrial controls

Electrical Characteristics

Part Number	I_H (A)	I_T (A)	V_{max} (V)	I_{max} (A)	Time to Trip (A)	Time to Trip (Sec.)	Pd_{typ} (W)	R_{min} (Ω)	$R1_{max}$ (Ω)
SRF1206P005	0.05	0.15	30	10	0.25	1.50	0.40	2.500	40.00
SRF1206P010	0.10	0.25	30	10	0.50	1.20	0.40	1.400	15.00
SRF1206P012	0.12	0.29	30	10	8.00	0.10	0.40	1.350	8.500
SRF1206P020	0.20	0.46	24	10	8.00	0.10	0.60	0.600	2.600
SRF1206P025	0.25	0.55	16	10	1.25	0.10	0.60	0.400	1.800
SRF1206P035	0.35	0.75	6	40	8.00	0.10	0.60	0.300	1.200
SRF1206P050	0.50	1.00	13.2	40	8.00	0.10	0.40	0.150	0.700
SRF1206P075	0.75	1.50	6	100	8.00	0.10	0.40	0.100	0.400
SRF1206P100	1.00	2.00	6	100	8.00	0.10	0.60	0.070	0.280
SRF1206P110	1.10	2.20	6	100	8.00	0.10	0.60	0.060	0.200
SRF1206P150	1.50	3.00	6	100	8.00	0.30	0.60	0.030	0.130
SRF1206P200	2.00	4.00	6	100	8.00	1.00	0.70	0.020	0.085

I_{hold} = Hold current: maximum current device will pass without tripping in 25°C still air.
I_{trip} = Trip current: minimum current at which the device will trip in 25°C still air.
V_{max} = Maximum voltage device can withstand without damage at rated current (I max)
I_{max} = Maximum fault current device can withstand without damage at rated voltage (V_{max})
P_d = Power dissipated from device when in the tripped state at 25°C still air.
R_{min} = Minimum resistance of device in initial (un-soldered) state.
R_{typ} = Typical resistance of device in initial (un-soldered) state.
R_{1max} = Maximum resistance of device at 25°C measured one hour after tripping or reflow soldering of 260°C for 20 sec.

Dimensions

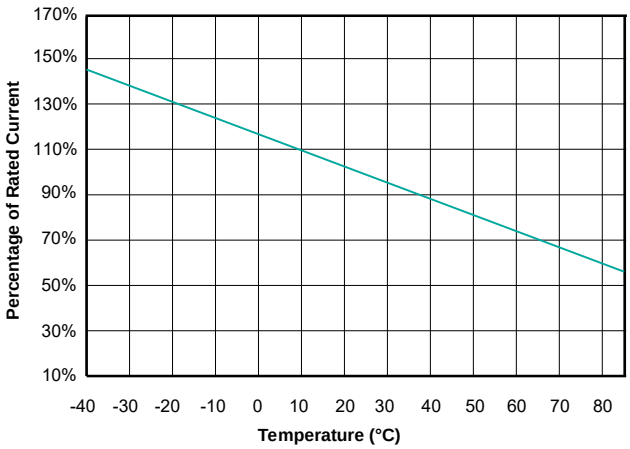


Part Number	Marking	A		B		C		D
		Min.	Max.	Min.	Max.	Min.	Max.	Min.
SRF1206P005	T0	3.00	3.40	1.40	1.80	0.80	1.20	0.25
SRF1206P010	T1	3.00	3.40	1.40	1.80	0.80	1.20	0.25
SRF1206P012	T01	3.00	3.40	1.40	1.80	0.80	1.20	0.25
SRF1206P020	T02	3.00	3.40	1.40	1.80	0.60	1.00	0.25
SRF1206P025	T03	3.00	3.40	1.40	1.80	0.60	1.00	0.25
SRF1206P035	T04	3.00	3.40	1.40	1.80	0.60	1.00	0.25
SRF1206P050	T05	3.00	3.40	1.40	1.80	0.55	0.75	0.25
SRF1206P075	T07	3.00	3.40	1.40	1.80	0.45	0.85	0.25
SRF1206P100	T10	3.00	3.40	1.40	1.80	0.60	1.00	0.25
SRF1206P110	T10	3.00	3.40	1.40	1.80	0.60	1.00	0.25
SRF1206P150	T15	3.00	3.40	1.40	1.80	0.60	1.00	0.25
SRF1206P200	T20	3.00	3.50	1.40	1.80	0.60	1.00	0.25

Thermal Derating Chart Hold Current (A)

Part Number	Ambient Operating Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SRF1206P005	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03
SRF1206P010	0.16	0.14	0.13	0.10	0.09	0.08	0.75	0.07	0.06
SRF1206P012	0.19	0.17	0.15	0.12	0.11	0.10	0.09	0.08	0.07
SRF1206P020	0.30	0.27	0.24	0.20	0.18	0.16	0.14	0.12	0.11
SRF1206P025	0.38	0.34	0.30	0.25	0.23	0.20	0.18	0.15	0.14
SRF1206P035	0.51	0.46	0.40	0.35	0.30	0.27	0.24	0.22	0.18
SRF1206P050	0.76	0.68	0.59	0.50	0.44	0.40	0.35	0.32	0.26
SRF1206P075	1.11	1.00	0.85	0.75	0.67	0.61	0.52	0.50	0.42
SRF1206P100	1.60	1.40	1.30	1.00	0.90	0.80	0.75	0.70	0.60
SRF1206P110	1.64	1.46	1.30	1.10	0.92	0.83	0.80	0.65	0.52
SRF1206P150	2.20	1.99	1.77	1.50	1.34	1.23	1.10	1.01	0.84
SRF1206P200	2.88	2.61	2.28	2.00	1.80	1.66	1.51	1.39	1.19

Temperature Rerating Curve



Packaging Options

$I_{hold(A)}$	Quantity
0.05~0.12, 1~2	3,500pcs
0.2~0.75	4,000pcs

Reel packaging per EIA-481-1 standard