



SEMIFUSE[®] SFS0603F PTC Fuses

The SFS0603F series PTC fuse is the smallest in our SMD range. It offers a surface mount solution for motherboard, computer peripheral and various electronic applications. The 0603 footprint can handle continuous currents up to 0.2A and voltages to 60V.

Characteristics

Agency Approvals; UL, CSA and TÜV

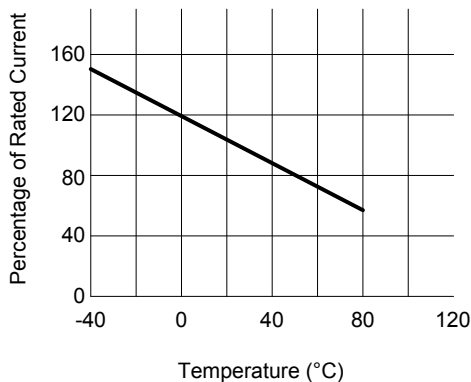
Part Number	I _{hold} (A)	I _{trip} (A)	V _{max} (Vdc)	I _{max} (A)	P _d ^{max} (W)	Maximum Time to Trip @ 23°C		Resistance @ 23°C		Maximum Dimension (mm)	
						Current (A)	Time (Sec.)	R _{min} (Ω)	R _{1max} (Ω)	A	B
SFS0603F001TF	0.01	0.03	60	40	0.5	0.20	1.00	15.0	100	1.80	1.00
SFS0603F002TF	0.02	0.06	60	40	0.5	0.20	1.00	12.0	70.0	1.80	1.00
SFS0603F003TF	0.03	0.09	30	40	0.5	0.20	1.00	6.00	50.0	1.80	1.00
SFS0603F004TF	0.04	0.12	24	40	0.5	0.20	1.00	4.00	40.0	1.80	1.00
SFS0603F005TF	0.05	0.15	15	40	0.5	0.50	0.01	3.80	30.0	1.80	1.00
SFS0603F010TF	0.10	0.25	15	40	0.5	0.70	0.01	0.90	8.00	1.80	1.00
SFS0603F012TF	0.12	0.30	9	40	0.5	0.80	0.01	1.10	5.80	1.80	1.00
SFS0603F016TF	0.16	0.40	9	40	0.5	1.00	0.01	1.00	4.20	1.80	1.00
SFS0603F020TF	0.20	0.45	9	40	0.5	2.00	0.01	0.55	3.50	1.80	1.00

Definitions

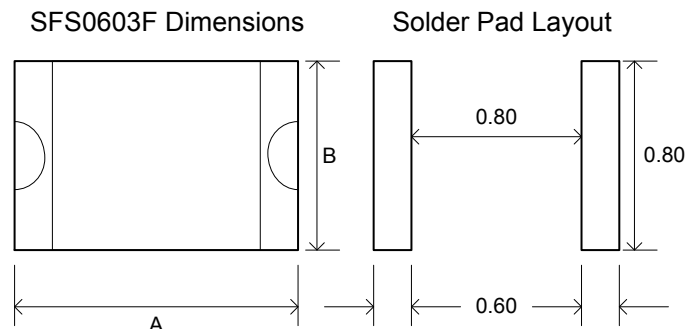
- I_{hold} = Hold current, maximum current PTC will pass without tripping in 23°C still air.
- I_{trip} = Trip current - minimum current at which the PTC will trip in still air at 23°C.
- V_{max} = Maximum voltage PTC can withstand without damage at rated current (I_{max})
- I_{max} = Maximum fault current PTC can withstand without damage at rated voltage (V_{max})



Thermal De-Rating Curve



Configuration



CAUTION: Operating beyond the specified maximum ratings may result in device damage and cause possible arcing and flame.



SEMIFUSE[®] SFS0805F PTC Fuses

The SFS0805F series PTC fuse offers a surface mount solution for motherboard, computer peripheral and various electronic applications. The 0805 footprint can handle continuous currents up to 1A and voltages to 15V.

Characteristics

Agency Approvals; UL, CSA and TÜV

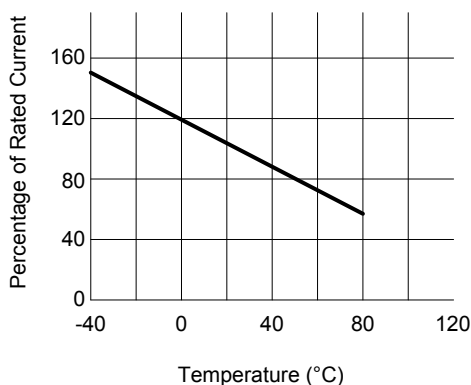
Part Number	I _{hold} (A)	I _{trip} (A)	V _{max} (Vdc)	I _{max} (A)	P _d ^{max} (W)	Maximum Time to Trip @ 23°C		Resistance @ 23°C		Maximum Dimension (mm)	
						Current (A)	Time (Sec.)	R _{min} (Ω)	R _{1max} (Ω)	A	B
SFS0805F010TF	0.10	0.30	15	100	0.5	0.50	1.50	0.700	6.000	2.30	1.50
SFS0805F020TF	0.20	0.50	9	100	0.5	8.00	0.02	0.400	3.500	2.30	1.50
SFS0805F035TF	0.35	0.75	6	100	0.5	8.00	0.10	0.250	1.200	2.30	1.50
SFS0805F050TF	0.50	1.00	6	100	0.5	8.00	0.10	0.150	0.850	2.30	1.50
SFS0805F075TF	0.75	1.50	6	40	0.6	8.00	0.20	0.090	0.350	2.30	1.50
SFS0805F100TF	1.00	1.95	6	40	0.6	8.00	0.30	0.060	0.210	2.30	1.50

Definitions

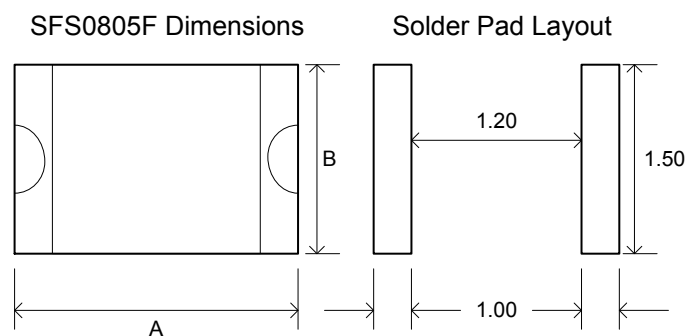
- I_{hold} = Hold current, maximum current PTC will pass without tripping in 23°C still air.
- I_{trip} = Trip current - minimum current at which the PTC will trip in still air at 23°C.
- V_{max} = Maximum voltage PTC can withstand without damage at rated current (I_{max})
- I_{max} = Maximum fault current PTC can withstand without damage at rated voltage (V_{max})



Thermal De-Rating Curve



Configuration



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SEMIFUSE[®] SFS1206F PTC Fuses

The SFS1206F series of PTC fuses offers a surface mount solution for motherboard, computer peripheral and various electronic applications. Our 1206 footprint can handle continuous currents up to 2A and voltages to 60V.

Characteristics

Agency Approvals; UL,C-UL and TÜV

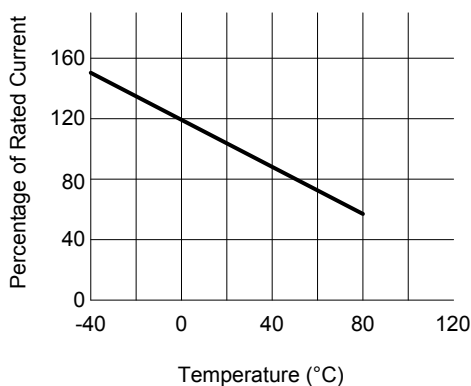
Part Number	I _{hold} (A)	I _{trip} (A)	V _{max} (Vdc)	I _{max} (A)	P _d ^{max} (W)	Maximum Time to Trip @ 23°C		Resistance @ 23°C		Maximum Dimension (mm)	
						Current (A)	Time (Sec.)	R _{min} (Ω)	R _{1max} (Ω)	A	B
SFS1206F005TF	0.05	0.15	60	10	0.4	0.25	1.50	3.600	50.00	3.50	1.80
SFS1206F010TF	0.10	0.25	60	10	0.4	0.50	1.00	1.600	15.00	3.50	1.80
SFS1206F020TF	0.20	0.40	30	10	0.4	8.00	0.05	0.600	2.500	3.50	1.80
SFS1206F035TF	0.35	0.75	16	40	0.4	8.00	0.10	0.300	1.200	3.50	1.80
SFS1206F050TF	0.50	1.00	8	40	0.4	8.00	0.10	0.150	0.700	3.50	1.80
SFS1206F075TF	0.75	1.50	6	100	0.6	8.00	0.20	0.090	0.290	3.50	1.80
SFS1206F100TF	1.00	1.80	6	100	0.6	8.00	0.30	0.055	0.210	3.50	1.80
SFS1206F110TF	1.10	2.20	6	100	0.8	8.00	0.30	0.040	0.180	3.50	1.80
SFS1206F150TF	1.50	3.00	6	100	0.8	8.00	1.00	0.040	0.120	3.50	1.80
SFS1206F200TF	2.00	3.50	6	100	0.8	8.00	1.50	0.018	0.080	3.50	1.80

Definitions

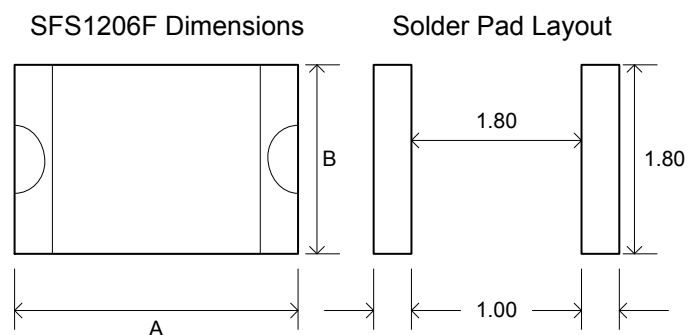
- I_{hold} = Hold current, maximum current PTC will pass without tripping in 23°C still air.
- I_{trip} = Trip current - minimum current at which the PTC will trip in still air at 23°C.
- V_{max} = Maximum voltage PTC can withstand without damage at rated current (I_{max})
- I_{max} = Maximum fault current PTC can withstand without damage at rated voltage (V_{max})



Thermal De-Rating Curve



Configuration



CAUTION: Operating beyond the specified maximum ratings may result in device damage and cause possible arcing and flame.



SEMIFUSE[®] SFS1210F PTC Fuses

The SFS1210F series of PTC fuses offers a surface mount solution for motherboard, computer peripheral and various electronic applications. This footprint can handle currents up to 2A and voltages to 60V.

Characteristics

Agency Approvals; UL, CSA and TÜV

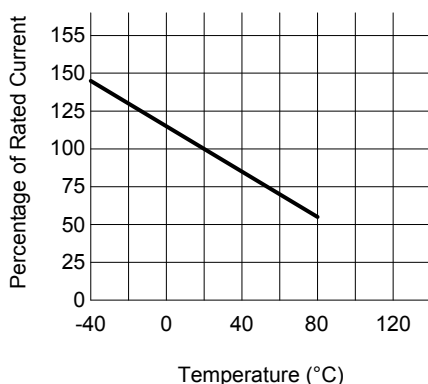
Part Number	I _{hold} (A)	I _{trip} (A)	V _{max} (Vdc)	I _{max} (A)	P _d ^{max} (W)	Maximum Time to Trip @ 23°C		Resistance @ 23°C		Maximum Dimension (mm)	
						Current (A)	Time (Sec.)	R _{min} (Ω)	R _{1max} (Ω)	A	B
SFS1210F005TF	0.05	0.15	60	10	0.6	0.25	3.00	3.600	50.00	3.43	2.80
SFS1210F010TF	0.10	0.25	60	10	0.6	0.50	1.50	1.600	15.00	3.43	2.80
SFS1210F020TF	0.20	0.40	30	10	0.6	8.00	0.02	0.800	5.00	3.43	2.80
SFS1210F035TF	0.35	0.70	16	40	0.6	8.00	0.20	0.320	1.30	3.43	2.80
SFS1210F050TF	0.50	1.00	16	40	0.6	8.00	0.10	0.250	0.90	3.43	2.80
SFS1210F075TF	0.75	1.50	8	40	0.6	8.00	0.10	0.130	0.40	3.43	2.80
SFS1210F110TF	1.10	2.20	6	100	0.8	8.00	0.30	0.060	0.21	3.43	2.80
SFS1210F150TF	1.50	3.00	6	100	0.8	8.00	0.50	0.040	0.11	3.43	2.80
SFS1210F175TF	1.75	4.00	6	100	0.8	8.00	0.60	0.020	0.08	3.43	2.80
SFS1210F200TF	2.00	4.00	6	100	0.8	8.00	1.00	0.015	0.07	3.43	2.80

Definitions

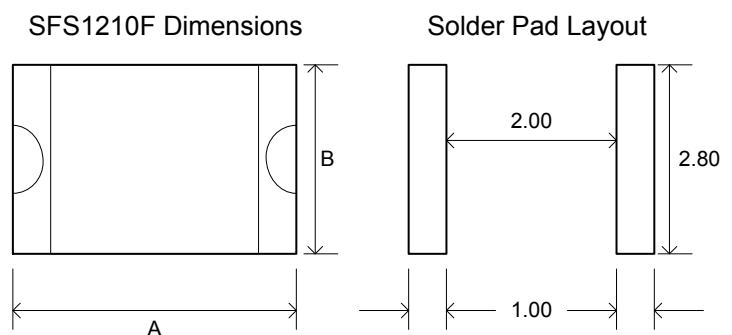
- I_{hold} = Hold current, maximum current PTC will pass without tripping in 23°C still air.
- I_{trip} = Trip current - minimum current at which the PTC will trip in still air at 23°C.
- V_{max} = Maximum voltage PTC can withstand without damage at rated current (I_{max})
- I_{max} = Maximum fault current PTC can withstand without damage at rated voltage (V_{max})



Thermal De-Rating Curve



Configuration



CAUTION: Operating beyond the specified maximum ratings may result in device damage and cause possible arcing and flame.



SEMIFUSE[®] SFS1812F PTC Fuses

The SFS1812F series of PTC fuses is our mid-size SMD range. The high ratings allow engineers to replace radial PTCs with SMD solutions in numerous electronic applications. This footprint can handle currents up to 3A and voltages to 60V.

Characteristics

Agency Approvals; UL, CSA and TÜV

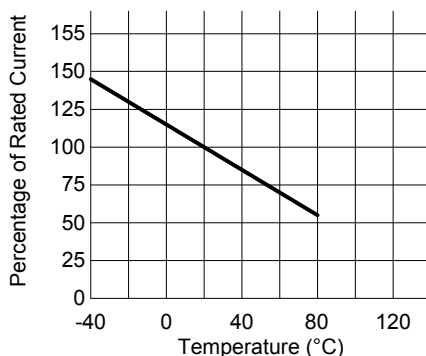
Part Number	I _{hold} (A)	I _{trip} (A)	V _{max} (Vdc)	I _{max} (A)	P _d ^{max} (W)	Maximum Time to Trip @ 23°C		Resistance @ 23°C		Maximum Dimension (mm)	
						Current (A)	Time (Sec.)	R _{min} (Ω)	R _{1max} (Ω)	A	B
SFS1812F010TF	0.10	0.30	60	10	0.8	8.0	0.02	1.600	15.00	4.73	3.41
SFS1812F014TF	0.14	0.30	60	10	0.8	8.0	0.01	1.200	6.500	4.73	3.41
SFS1812F020TF	0.20	0.40	30	10	0.8	8.0	0.02	0.800	5.000	4.73	3.41
SFS1812F035TF	0.35	0.70	16	40	0.8	8.0	0.10	0.320	1.500	4.73	3.41
SFS1812F050TF	0.50	1.00	16	40	0.8	8.0	0.15	0.150	1.000	4.73	3.41
SFS1812F075TF	0.75	1.50	33	40	1.0	8.0	0.20	0.110	0.400	4.73	3.41
SFS1812F110TF	1.10	2.20	24	100	1.0	8.0	0.50	0.060	0.200	4.73	3.41
SFS1812F125TF	1.25	2.50	6	40	0.8	8.0	0.40	0.050	0.140	4.73	3.41
SFS1812F150TF	1.50	3.00	24	100	1.0	8.0	1.50	0.040	0.120	4.73	3.41
SFS1812F160TF	1.60	3.20	16	100	1.0	8.0	1.00	0.030	0.100	4.73	3.41
SFS1812F200TF	2.00	3.50	8	100	1.0	8.0	2.00	0.020	0.070	4.73	3.41
SFS1812F260TF	2.60	5.00	16	100	1.3	8.0	5.00	0.015	0.050	4.73	3.41
SFS1812F300TF	3.00	5.00	6	100	1.0	8.0	4.00	0.012	0.040	4.73	3.41

Definitions

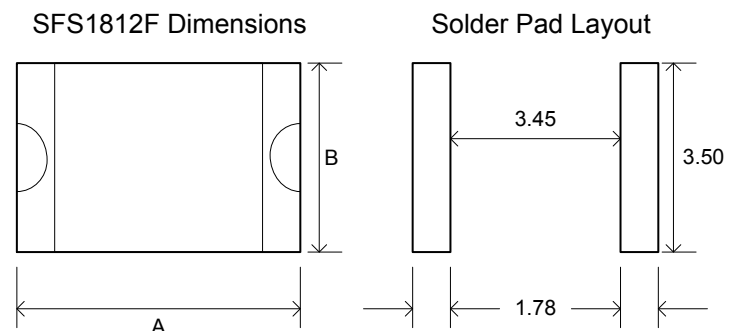
- I_{hold} = Hold current, maximum current PTC will pass without tripping in 23°C still air.
- I_{trip} = Trip current - minimum current at which the PTC will trip in still air at 23°C.
- V_{max} = Maximum voltage PTC can withstand without damage at rated current (I_{max})
- I_{max} = Maximum fault current PTC can withstand without damage at rated voltage (V_{max})



Thermal De-Rating Curve



Configuration



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SEMIFUSE[®] SFS2920F PTC Fuses

The SFS2920F series of PTC fuses is the largest in our SMD range. The high ratings allow engineers to replace radial PTCs with SMD solutions in numerous electronic applications. This footprint can handle currents up to 3A and voltages to 60V.

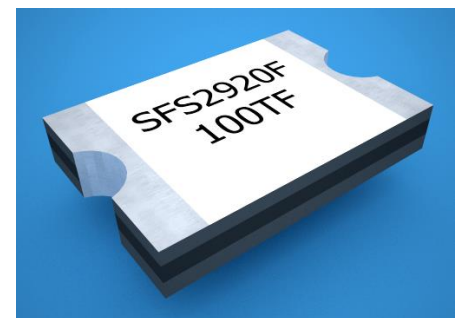
Characteristics

Agency Approvals; UL, CSA and TÜV

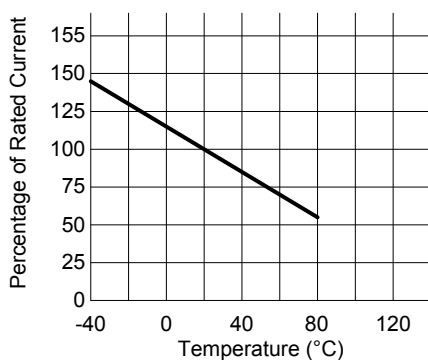
Part Number	I _{hold} (A)	I _{trip} (A)	V _{max} (Vdc)	I _{max} (A)	P _d ^{max} (W)	Maximum Time to Trip @ 23°C		Resistance @ 23°C		Maximum Dimension (mm)	
						Current (A)	Time (Sec.)	R _{min} (Ω)	R _{1max} (Ω)	A	B
SFS2920F030TF	0.30	0.60	60	100	1.5	1.5	3.00	1.00	4.800	7.98	5.44
SFS2920F050TF	0.50	1.00	60	100	1.5	2.5	4.00	0.300	1.400	7.98	5.44
SFS2920F075TF	0.75	1.50	60	10	1.5	8.0	0.30	0.180	1.000	7.98	5.44
SFS2920F100TF	1.10	2.20	33	100	1.5	8.0	0.50	0.090	0.410	7.98	5.44
SFS2920F125TF	1.25	2.50	33	100	1.5	8.0	2.00	0.050	0.250	7.98	5.44
SFS2920F150TF	1.50	3.00	33	40	1.5	8.0	2.00	0.050	0.230	7.98	5.44
SFS2920F185TF	1.85	3.70	33	40	1.5	8.0	2.50	0.040	0.150	7.98	5.44
SFS2920F200TF	2.00	4.00	24	40	1.5	8.0	4.50	0.035	0.120	7.98	5.44
SFS2920F250TF	2.50	5.00	16	100	1.5	8.0	16.0	0.025	0.085	7.98	5.44
SFS2920F260TF	2.60	5.20	6	100	1.5	8.0	20.0	0.020	0.075	7.98	5.44
SFS2920F300TF	3.00	5.20	15	40	1.5	8.0	25.0	0.015	0.048	7.98	5.44

Definitions

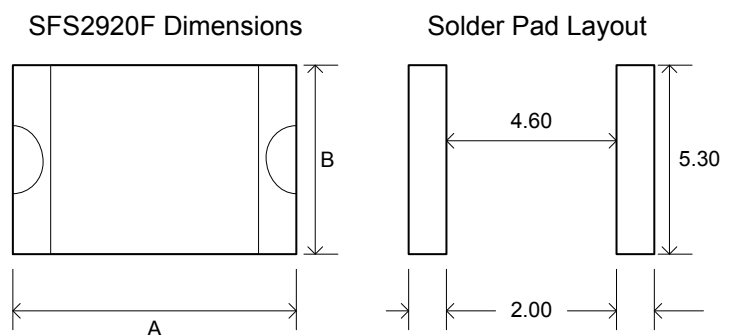
- I_{hold} = Hold current, maximum current PTC will pass without tripping in 23°C still air.
- I_{trip} = Trip current - minimum current at which the PTC will trip in still air at 23°C.
- V_{max} = Maximum voltage PTC can withstand without damage at rated current (I_{max})
- I_{max} = Maximum fault current PTC can withstand without damage at rated voltage (V_{max})



Thermal De-Rating Curve



Configuration



CAUTION: Operating beyond the specified maximum ratings may result in device damage and cause possible arcing and flame.