



Features

- Broad range of resettable devices available
- Current ratings from : 1206 → 0.16A to 1.10A,
1812 → 0.50A to 2.60A
- Wide voltage range for all applications
- Small footprint
- Fast time-to-trip
- Low resistance to 1206 → 0.04Ω/1812 → 0.01Ω
- UL and TÜV approved

Applications

Applications for Motherboard, Modem, USB Hub, IEEE 1394 card, Digital camera, Disk drive, CD ROM, and Game machines etc.

How to Order

PFS **1812** **I050** **S**

1 2 3 4 5

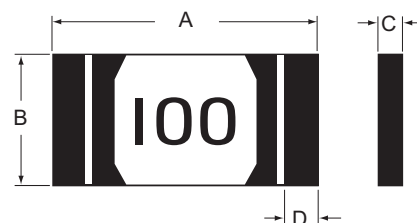
- 1 Series Type : Poly Resettable Fuse for SMD
- 2 Chip Size (EIA) : 1206/1812
- 3 Hold Current Value : ex: I050=0.50A
- 4 S means Lead Free
- 5 Suffix for Special code

Dimensions

Unit: mm

PFS1206 Series

Part Number	A		B		C		D	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
PFS1206I016S	3.0	3.4	1.4	1.8	0.27	0.57	0.25	0.65
PFS1206I020S	3.0	3.4	1.4	1.8	0.27	0.57	0.25	0.65
PFS1206I035S	3.0	3.4	1.4	1.8	0.27	0.57	0.25	0.65
PFS1206I035S-16V	3.0	3.4	1.4	1.8	0.27	0.57	0.25	0.65
PFS1206I050S	3.0	3.4	1.4	1.8	0.27	0.57	0.25	0.65
PFS1206I075S	3.0	3.4	1.4	1.8	0.60	0.87	0.25	0.65
PFS1206I100S	3.0	3.4	1.4	1.8	0.60	0.87	0.25	0.65
PFS1206I110S	3.0	3.4	1.4	1.8	0.60	0.87	0.25	0.65

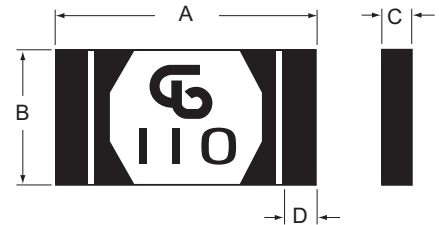


Dimensions

Unit: mm

PFS1812 Series

Part Number	A		B		C		D
	Min.	Max.	Min.	Max.	Min.	Max.	Min.
PFS1812I050S	4.37	4.73	3.07	3.41	0.27	0.57	0.3
PFS1812I075S	4.37	4.73	3.07	3.41	0.27	0.57	0.3
PFS1812I110S	4.37	4.73	3.07	3.41	0.27	0.57	0.3
PFS1812I110S-16V	4.37	4.73	3.07	3.41	0.60	0.87	0.3
PFS1812I150S	4.37	4.73	3.07	3.41	0.27	0.57	0.3
PFS1812I160S	4.37	4.73	3.07	3.41	0.27	0.57	0.3
PFS1812I200S	4.37	4.73	3.07	3.41	0.60	0.87	0.3
PFS1812I260S	4.37	4.73	3.07	3.41	0.80	1.20	0.3



Specifications

PFS1206 Series

Part Number	I _{hold} (A)	I _{trip} (A)	V _{max} (Vdc)	I _{max} (A)	P _{dmax} (W)	Max. Time to trip		R ₂₃ (Ω)	
						(A)	(S)	R _{min.}	R _{1max.}
PFS1206I016S	0.16	0.37	30	20	0.6	1	0.3	1.10	5.00
PFS1206I020S	0.20	0.42	30	20	0.6	8	0.1	0.65	3.30
PFS1206I035S	0.35	0.70	6	40	0.6	8	0.1	0.30	1.20
PFS1206I035S-16V	0.35	0.75	16	40	0.6	8	0.1	0.45	1.40
PFS1206I050S	0.50	1.00	6	40	0.6	8	0.1	0.15	0.70
PFS1206I075S	0.75	1.50	6	40	0.8	8	0.2	0.09	0.40
PFS1206I100S	1.00	1.80	6	40	0.8	8	0.3	0.06	0.30
PFS1206I110S	1.10	2.20	6	40	0.8	8	0.3	0.04	0.21

PFS1812 Series

Part Number	I _{hold} (A)	I _{trip} (A)	V _{max} (Vdc)	I _{max} (A)	P _{dmax} (W)	Max. Time to trip		R ₂₃ (Ω)	
						(A)	(S)	R _{min.}	R _{1max.}
PFS1812I050S	0.50	1.0	15	40	0.8	8	0.15	0.15	1.00
PFS1812I075S	0.75	1.5	13.2	40	0.8	8	0.20	0.11	0.45
PFS1812I110S	1.10	2.2	8	40	0.8	8	0.30	0.04	0.21
PFS1812I110S-16V	1.10	2.2	16	40	0.8	8	0.50	0.06	0.18
PFS1812I150S	1.50	3.0	6	40	0.8	8	0.50	0.04	0.12
PFS1812I160S	1.60	3.2	8	40	0.8	8	1.00	0.030	0.10
PFS1812I200S	2.00	4.0	8	40	1.0	8	2.00	0.020	0.075
PFS1812I260S	2.60	5.2	8	40	1.0	8	2.50	0.010	0.052

I_{hold} —Hold current; maximum current device will sustain for 30 min. without tripping in 23°C still air.

I_{trip} —Trip current, minimum current at which the device will trip in 23°C still air.

V_{max} —Maximum voltage device can withstand without damage at rated current.

I_{max} —Maximum fault current device can withstand without damage at rated voltage.

P_{dmax} —Power dissipated from device when in the tripped state at 23°C still air.

R_{min} —Minimum resistance of device in initial (un-soldered) state.

R_{1max} —Maximum resistance of device at 23°C measured one hour post reflow.

Electrical Performance

Item	Specifications	Test Methods
Hold Current	No trip	23°C, I _{hold} , 30min
Time to Trip	Less than max spec time	23°C, I _{test} = 1A or 8A
One Hour Post-trip Resistance	Per spec	23°C, until trip

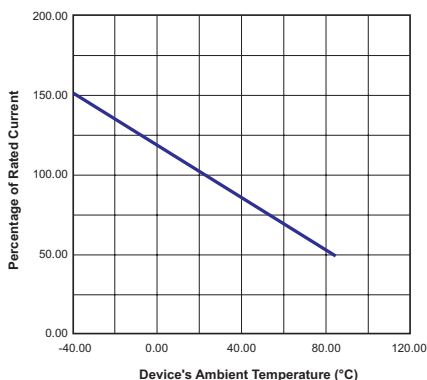
Environmental Performance

Item	Resistance Change	Test Methods
Humidity Aging	±5% typical	85°C, 85% RH, 1000 hrs.
Thermal Shock	-33% typical	MIL-STD-883C, Method 107G 85°C, -40°C (20 times) or 125°C, -55°C (10 times)
Vibration	No change	MIL-STD-883D, Method 2026
Passive Aging	±5% typical	+85°C, 1000 hrs
Solvent resistance	No change	MIL-STD-202, Method 215

Physical Characteristics

Item	
Terminal Pad Material	Solder-plated copper
Soldering	ANSI/J-STD-002 Category 3

Thermal Derating chart



PFS1206 Series

TEMP (°C)	-40	-20	0	23	40	50	60	70	85
PFS1206I016S	0.24	0.22	0.19	0.16	0.14	0.13	0.10	0.09	0.08
PFS1206I020S	0.29	0.26	0.23	0.20	0.17	0.16	0.14	0.13	0.10
PFS1206I035S	0.52	0.46	0.41	0.35	0.31	0.29	0.26	0.23	0.18
PFS1206I035S-16V	0.58	0.51	0.44	0.35	0.31	0.28	0.24	0.21	0.16
PFS1206I050S	0.76	0.68	0.59	0.50	0.44	0.4	0.35	0.32	0.26
PFS1206I075S	1.11	1.00	0.85	0.75	0.67	0.61	0.52	0.50	0.42
PFS1206I100S	1.49	1.34	1.15	1.00	0.89	0.81	0.70	0.66	0.55
PFS1206I110S	1.63	1.46	1.30	1.10	0.96	0.87	0.79	0.70	0.57

PFS1812 Series

TEMP (°C)	-40	-20	0	23	40	50	60	70	85
PFS1812I050S	0.59	0.57	0.55	0.50	0.45	0.43	0.35	0.30	0.23
PFS1812I075S	1.10	0.99	0.87	0.75	0.63	0.57	0.49	0.45	0.35
PFS1812I110S	1.60	1.45	1.28	1.10	0.92	0.83	0.71	0.66	0.52
PFS1812I110S-16V	1.61	1.46	1.25	1.10	0.98	0.90	0.78	0.74	0.62
PFS1812I150S	2.30	2.05	1.77	1.50	1.23	1.09	0.95	0.82	0.61
PFS1812I160S	2.32	2.10	1.80	1.6	1.43	1.32	1.14	1.10	0.93
PFS1812I1200S	2.88	2.61	2.25	2.00	1.80	1.66	1.45	1.39	1.19
PFS1812I1260S	3.70	3.36	2.90	2.60	2.35	2.18	1.90	1.84	1.59

Package

Size EIA (EIAJ)	1206 (3216)	1812 (4532)
Standard Packing Quantity (pcs / reel)	5,000pcs	2,000pcs