

FAST ACTING CHIP FUSES



DESCRIPTION

The PF0603F Series are fast acting chip fuses that are designed to protect consumer electronics, computers and telecommunications equipment and devices from the risk of fire or shock caused by over-currents.

The PF0603F Series is available in a rugged ceramic and glass package. These devices have excellent environmental performance.

FEATURES

- Fast Acting for Excessive Current
- Compatible with Reflow and Wave Solder
- Excellent Environmental Performance
- RoHS & REACH Compliant
- Halogen-Free Material
- Life Test: MIL-STD-202, Method 108A
- Humidity Bias: MIL-STD-202, Method 103
- Moisture Resistance Test: MIL-STD-202, Method 106G
- Thermal Shock: MIL-STD-202, Method 107G
- Board Flex: AEC-Q200-005, Appendix 2 (1mm Min)
- Vibration: MIL-STD-202, Method 204D
- Mechanical Shock: MIL-STD-202, Method 213B
- Solderability: MIL-STD-202, Method 208H
- Resistance to Solder Heat: MIL-STD-202, Method 210A

APPLICATIONS

- Telecommunications Equipment - DSL/Cable Modems
- SMART Phones and other Handheld Devices
- Computers - Laptops, Desktops, Servers
- Computer Peripherals - Printers, LCD Panels, Scanners
- Consumer Electronics - DVD Player, MP3/4 Player

MECHANICAL CHARACTERISTICS

- Ceramic and Glass Package
- Approximate Weight: TBA grams
- Lead-Free
- Soldering Method
 - Wave Soldering: 260°C, 10s Max
 - Reflow Soldering: 260°C, 30s Max

ELECTRICAL CHARACTERISTICS

AMPERE RATING	% OF AMP RATING	OPENING TIME
250mA - 6A	100%	4 Hours Minimum
250mA - 6A	250%	5 Seconds Maximum

TYPICAL DEVICE CHARACTERISTICS

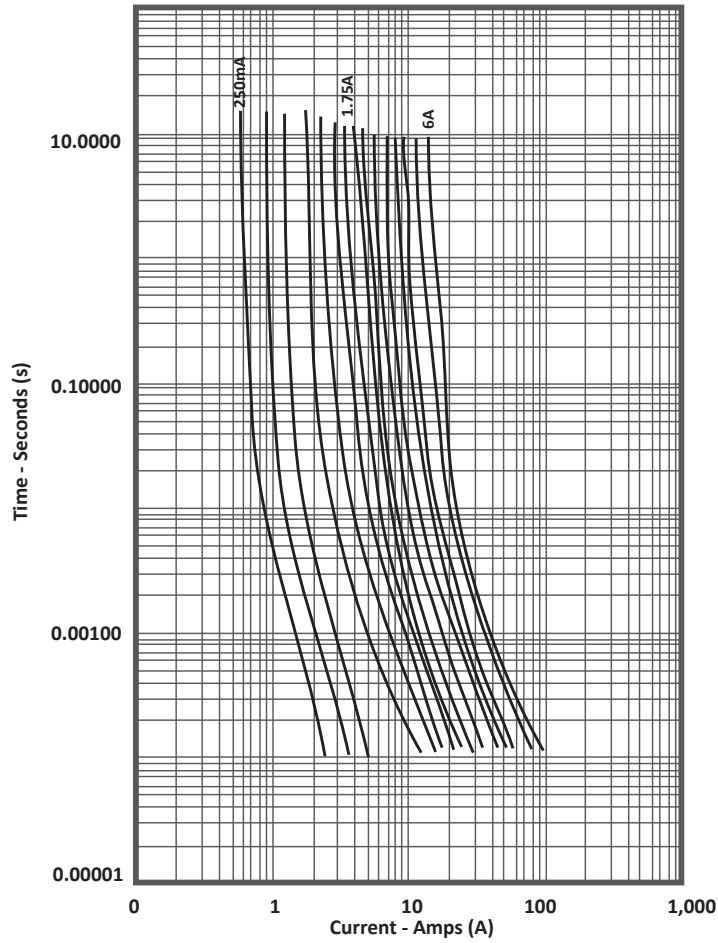
ELECTRICAL SPECIFICATIONS								
PART NUMBER	MARKING CODE	CURRENT RATING AMPS	VOLTAGE RATING		INTERRUPTING RATING (Note 1) AC/DC AMPS	TYPICAL RESISTANCE (Note 2) OHMS	TYPICAL MELT I ² t (Note 3) DC (A ² s)	TYPICAL VOLTAGE DROP (Note 4) VOLTS
			AC VOLTS	DC VOLTS				
PF0603F250	D	0.250	32	32	50	5.1	0.0004	1.30
PF0603F375	E	0.375	32	32	50	2.4	0.0009	0.93
PF0603F500	F	0.500	32	32	50	1.1	0.0018	0.66
PF0603F750	G	0.750	32	32	50	0.7	0.0070	0.58
PF0603F1	H	1.00	32	32	50	0.23	0.015	0.25
PF0603F1.25	J	1.25	32	32	35	0.165	0.022	0.19
PF0603F1.5	K	1.50	32	32	35	0.125	0.032	0.18
PF0603F1.75	M	1.75	32	32	35	0.08	0.048	0.17
PF0603F2	N	2.00	32	32	35	0.063	0.052	0.17
PF0603F2.5	O	2.50	32	32	35	0.04	0.061	0.13
PF0603F3	P	3.00	32	32	35	0.028	0.070	0.12
PF0603F3.5	R	3.50	32	32	35	0.022	0.122	0.11
PF0603F4	S	4.00	32	32	35	0.018	0.220	0.11
PF0603F5	T	5.00	32	32	35	0.011	0.680	0.11
PF0603F6	Y	6.00	32	32	35	0.008	0.920	0.10

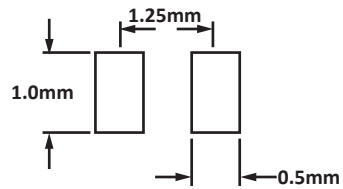
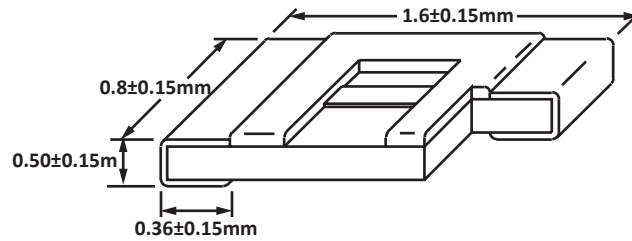
NOTES

1. AC Interrupting Rating - measured at rated voltage with a unity power factor; DC Interrupting Rating - measured at rated voltage, time constant of less than 50 microseconds, battery source.
2. DC Cold Resistance - measured at 10% of rated current.
3. Typical Melting I²t - measured with a battery bank at rated DC voltage, 10x-rated current, not to exceed IR, time constant of calibrated circuit less than 50 microseconds. 4A, 5A and 6A measured at interrupting rating.
4. Typical Voltage drop - measured at rated current after temperature stabilizes. Device designed to carry rated current for four hours minimum. An operating current of 75% or less of rated current is recommended, with further derating required at elevated ambient temperatures.

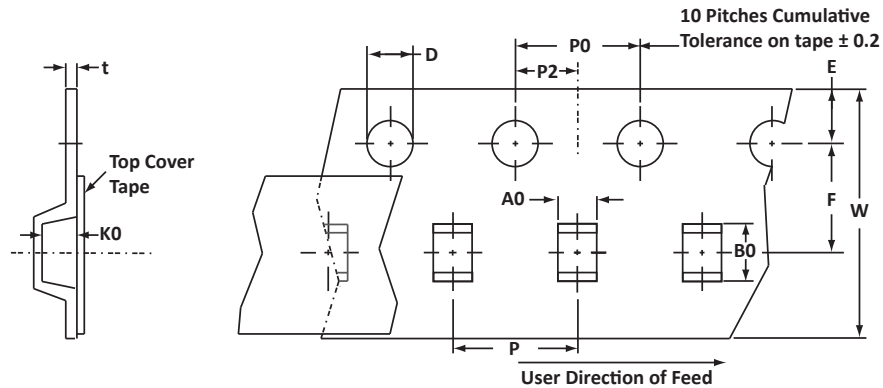
TYPICAL DEVICE CHARACTERISTICS

**FIGURE 1
TIME CURRENT CURVE**



PACKAGE OUTLINE AND PAD LAYOUT INFORMATION

TAPE AND REEL



SPECIFICATIONS

REEL DIA.	TAPE WIDTH	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
178mm (7")	8mm	1.05 ± 0.10	1.97 ± 0.10	0.70 ± 0.10	1.50 ± 0.10	1.75 ± 0.10	3.50 ± 0.05	8.00 ± 0.30	4.00 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	0.25

NOTES

1. Dimensions are in millimeters.
2. Surface mount product is taped and reeled in accordance with EIA-481.
3. Suffix - T7 = 7" Reel - 5,000 pieces per 8mm tape.
4. Marking on Part - marking code.

ORDERING INFORMATION

BASE PART NUMBER (xx = Voltage)	LEADFREE SUFFIX	TAPE SUFFIX	QTY/REEL	REEL SIZE	TUBE QTY
PF0603Fxx	N/A	-T7	5,000	7"	N/A

This device is only available in a Lead-Free configuration.

COMPANY INFORMATION

COMPANY PROFILE

In business more than 20 years, ProTek Devices™ is a privately-held company located in Tempe, Arizona, that offers a product line of transient voltage suppressors (TVS); avalanche breakdown diodes; steering diode TVS arrays and other surge suppressor component products. These TVS devices protect electronic systems from the effects of lightning, electrostatic discharge (ESD), nuclear electromagnetic pulses (NEMP), inductive switching and EMI / RFI. ProTek Devices also offers high performance interface and linear products that include analog switches; multiplexers; LED drivers; audio control ICs; RF and related high frequency products. The analog devices work in a host of consumer; industrial; automotive and other applications.

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