

## SLOW BLOW FUSES



### DESCRIPTION

The PF0603S Series are high inrush slow blow 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 PF0603S Series is available in a rugged ceramic and glass package. These devices have excellent environmental performance.

### FEATURES

- High Inrush Current Withstanding Capability
- 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
- Terminal Strength Test: AEC-Q200-005 Appendix 2(Note 1mm Min)
- Vibration: MIL-STD-202, Method 204D
- Mechanical Shock: MIL-STD-202, Method 213B
- Solderability: ANSI/J-STD-002
- Resistance to Solder Heat: MIL-STD-202, Method 210A
- Resistance to Solvents Test: MIL-STD-202, Method 215A

### 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
1A-5A	100%	4 Hours Minimum
1A-5A	200%	1 ~ 120 Seconds
1A-5A	300%	0.1 ~ 3 Seconds
1A-5A	800%	0.001 ~ 0.05 Seconds

**TYPICAL DEVICE CHARACTERISTICS**
**ELECTRICAL SPECIFICATIONS**

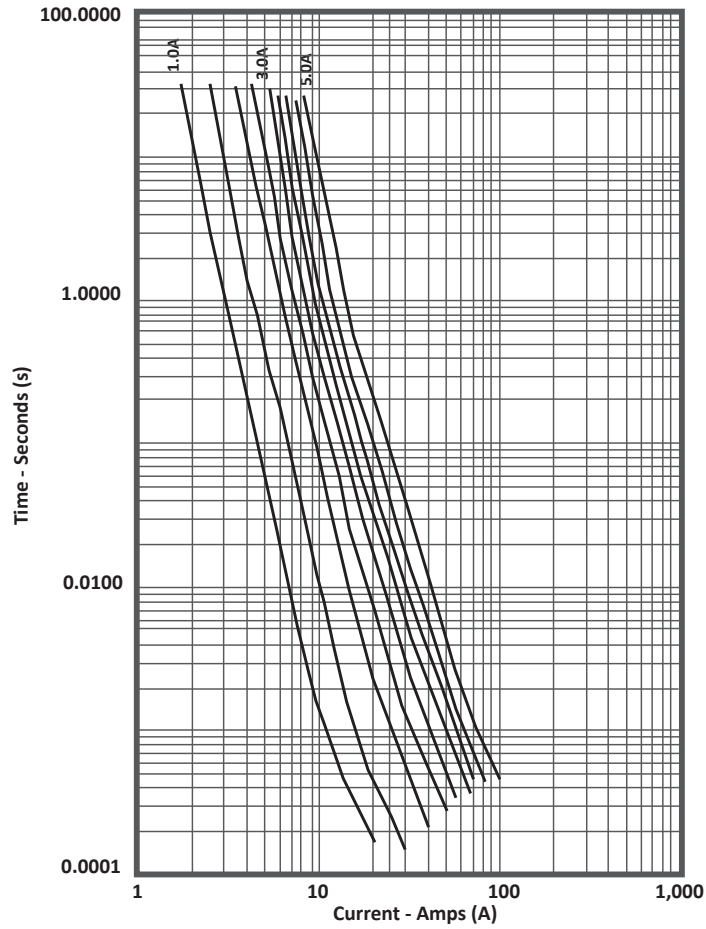
PART NUMBER	MARKING CODE	CURRENT RATING	VOLTAGE RATING	INTERRUPTING RATING (Note 1)	TYPICAL RESISTANCE (Note 2)	TYPICAL MELT I <sup>2</sup> t (Note 3)
		AMPS	DC	DC AMPS	OHMS	DC (A <sup>2</sup> s)
PF0603S1	H	1.00	32	35	0.25	0.09
PF0603S1.5	K	1.50	32	35	0.13	0.19
PF0603S2	N	2.00	32	35	0.07	0.30
PF0603S2.5	O	2.50	32	35	0.05	0.61
PF0603S3	P	3.00	32	35	0.035	0.83
PF0603S3.5	R	3.50	32	35	0.024	1.23
PF0603S4	S	4.00	32	35	0.02	2.22
PF0603S4.5	X	4.50	32	35	0.016	2.74
PF0603S5	T	5.00	32	35	0.013	3.40

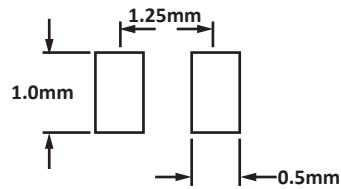
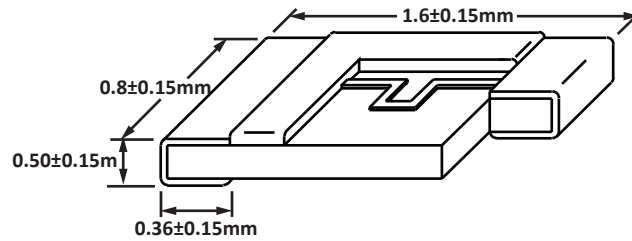
**NOTES**

1. 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 I<sup>2</sup>t - measured with a battery bank at rated DC voltage and at 0.001 second clear time, time constant of calibrated circuit less than 50 microseconds. 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.

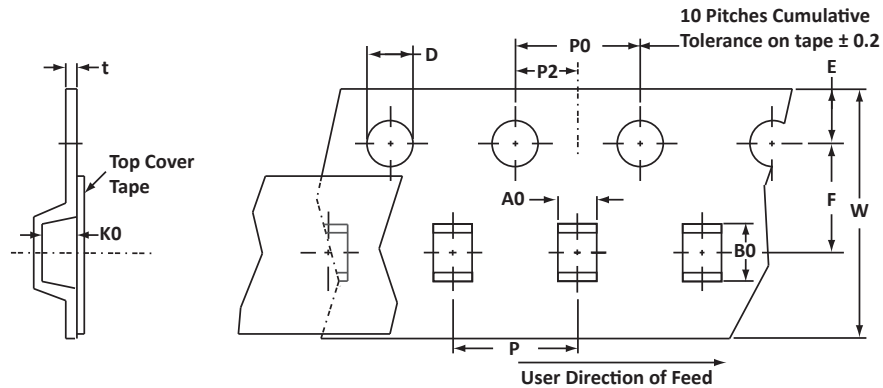
**TYPICAL DEVICE CHARACTERISTICS**

**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	0.51 ± 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

- Dimensions are in millimeters.
- Surface mount product is taped and reeled in accordance with EIA-481.
- Suffix - T75 = 7" Reel - 5,000 pieces per 8mm tape.
- Marking on Part - marking code.

## ORDERING INFORMATION

BASE PART NUMBER (xx = Voltage)	LEADFREE SUFFIX	TAPE SUFFIX	QTY/REEL	REEL SIZE	TUBE QTY
PF0603Sxx	N/A	-T75	5,000	7"	N/A

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

## COMPANY INFORMATION

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### COMPANY PROFILE

In business more than 25 years, ProTek Devices™ is a privately held semiconductor company. The company offers a product line of overvoltage protection and overcurrent protection components. These include transient voltage suppressor array (TVS arrays) avalanche breakdown diode, steering diode TVS array and electronics SMD chip fuses. These components deliver circuit protection in electronic systems from numerous overvoltage and overcurrent events. They include lightning; electrostatic discharge (ESD); nuclear electromagnetic pulses (NEMP); inductive switching; and electromagnetic interference (EMI) / radio frequency interference (RFI). ProTek Devices also offers LED wafer die for ESD protection and related high frequency products. ProTek Devices is ISO 9001:2015 certified.

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