

Surface-Mount Devices | 0603 Size

**SRF0603 Series**

**PTC Resettable Fuses**

**Features**

- Resettable over current and over temperature protection
- Small size of 0603
- Fast time-to-trip
- Small footprint
- RoHS complaint
- Low resistance



**Applications**

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



**Electrical Characteristics**

Part Number	I <sub>H</sub> (A)	I <sub>T</sub> (A)	V <sub>max</sub> (V)	I <sub>max</sub> (A)	Time to Trip		Pd <sub>typ</sub> (W)	R <sub>min</sub> (Ω)	R1 <sub>max</sub> (Ω)
					(A)	(Sec.)			
SRF0603P020	0.20	0.50	9	40	1.00	0.60	0.50	0.55	3.50

I<sub>H</sub> = Hold current: maximum current at which the device will not trip at 25 °C still air reflow soldering of 260 °C for 20 sec.  
 I<sub>T</sub> = Trip current: minimum current at which the device will always trip at 25 °C still air reflow soldering of 260 °C for 20 sec.  
 V<sub>max</sub> = Maximum continuous voltage device can withstand without damage at rated current  
 I<sub>max</sub> = Maximum fault current device can withstand without damage at rated voltage.  
 T<sub>trip</sub> = Maximum time to trip(s) at assigned current reflow soldering of 260 °C for 20 sec.  
 P<sub>dtyp</sub> = Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

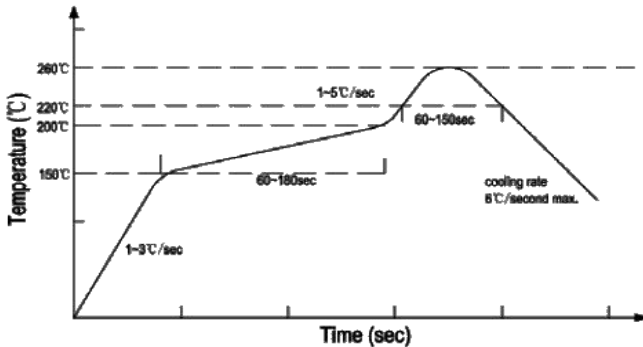
R<sub>min</sub> = Minimum resistance of device in initial (un-soldered) state.  
 R1<sub>max</sub> = Maximum resistance of device at 25 °C measured one hour after reflow soldering of 260 °C for 20 sec.

**Value specified is determined by using the PWB with 0.030" \*1.5oz copper traces. Caution: Operation beyond the specified rating may result in damage and possible arcing and flame.**

**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
SRF0603P020	0.27	0.25	0.23	0.20	0.17	0.14	0.12	0.10	0.07

### Solder Reflow Recommendation



Reflow -curve

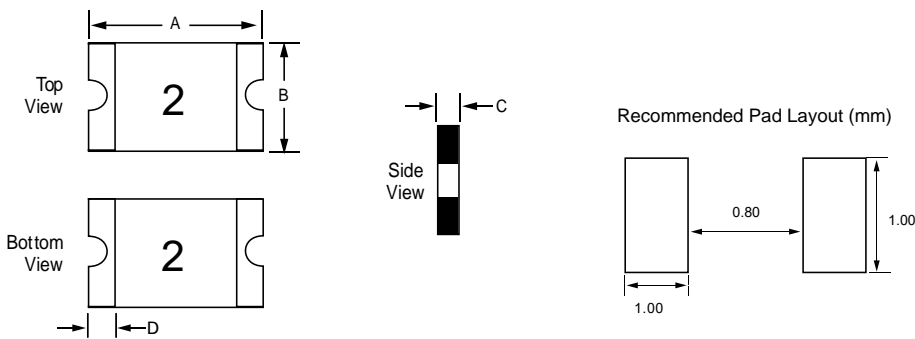
Recommended reflow methods: IR, hot air oven, nitrogen oven  
 Devices can be cleaned using standard industry methods and solvents.

**NOTE:**

If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

**Caution:** Operation beyond the rated voltage or current may result in rupture electrical arcing or flame

### Dimensions



Part Number	A		B		C		D
	Min	Max	Min	Max	Min	Max	Min
SRF0603P020	1.45	1.85	0.65	1.05	0.40	1.00	0.15

### Packaging Options

Part Number	Quantity
SRF0603P020	4,000pcs

Reel packaging per EIA -481 -1 standard

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