

**Bourns® SinglFuse™
Thin Film Chip Fuse**

Frequently Asked Questions

1. Is it necessary to derate a fuse for different temperatures?

Yes, it is necessary and a derating chart is found on every data sheet. Fuses have different current carrying capabilities at different temperatures so the derating factor must be taken into account at the design stage.

2. What is the maximum voltage a fuse can operate under?

The Vmax rating of the fuse is the maximum rating, and the voltage should never exceed this limit.

3. How should one select the proper fuse amperage?

The fuse rating should be selected based on 125 % of the circuit's full load current.

4. Fuses are RoHS compliant but do they contain any lead?

Yes, the fuses contain approximately 42 PPM of lead, which is well under the 1000 PPM specified in the RoHS* directive.

5. What is the resistance tolerance?

Resistance is dynamic as it is a function of temperature. A typical value is provided on every data sheet, which is measured at a current level less than 10 % of the rated current.

6. What is opening time versus fault current chart?

Again, this is dynamic as the higher the current the faster the device will open. A chart illustrating this is provided on every data sheet.

7. Is there any indication to show when the fuses are activated to open?

Sometimes a small puff of smoke will show the fuse has opened. Otherwise, the resistance of the fuse when measured will show an open circuit.

8. What is the current range?

Each family has its own current range:

- SF-0402F & SF-0402S Series ranges from 0.5 A~4.0 A
- SF-0603F & SF-0603S Series ranges from 0.5 A~5.0 A
- SF-1206F & SF-1206S Series ranges from 0.5 A~7.0 A.

9. Are Bourns® SinglFuse™ devices compatible with other fuse makers?

There is a full cross reference available to the major fuse suppliers.

10. What is the comparison between a SinglFuse™ device and a TeleFuse™ device?

Both are one-time fuses and both are surface mount devices. The telecom fuse is designed for telecom signal lines (e.g. tip & ring) while the SinglFuse™ device is designed for a wider spectrum of applications.

11. Why would an application use a SinglFuse™ device instead of a Multifuse® Resettable fuse?

Multifuse® products are resettable fuses and SinglFuse™ products are one-time acting fuses. Some applications require a physical break in the circuit if a short circuit arises and without the circuit resetting and continuing to operate. In this case, a SinglFuse™ device can be used. In applications where the circuit is to be protected from an overcurrent event and then continue operating after the event, a Multifuse® resettable fuse will be used.

12. What will be the shelf life of a one time fuse?

The shelf life is at least 2 years.

13. What is the typical lead time for these products?

If parts are not in stock, lead time is 4 weeks.

14. What is the standard package?

Tape & reel - 5K pieces for 1206 & 0603 sizes & 10K pieces for 0402 sizes.

15. What is the minimum quantity for customization?

100K

**RoHS Directive 2002/95/EC Jan 27 2003 including Annex.*