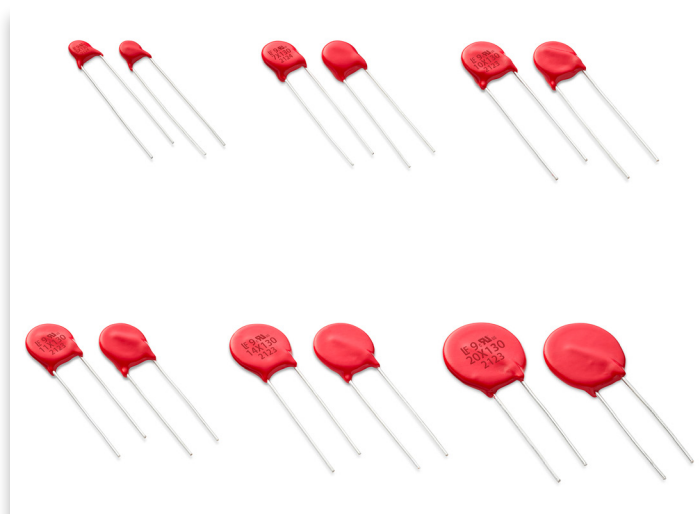


# Xtreme Varistor Series

## Product Brief



### Features

- High operating temperature: 125°C
- High surge energy/current absorption withstanding capability
- Safety agency approvals: UL, IEC and CQC
- RoHS compliant, Halogen-free and Pb-free
- Passed Needle Flame Test per IEC 61051-1

### Higher surge rating in a smaller disc size

Littelfuse Xtreme Varistor Series is specifically designed for applications requiring high surge energy/current absorption and multiple surge pulse withstanding capability. Xtreme Varistor Series is available in six nominal disc sizes: 5 mm, 7 mm, 10 mm, 11 mm, 14 mm, and 20 mm.

### Applications

- Home appliance
- Outdoor LED lighting driver/ power supply
- Switch Mode Power Supply (SMPS)
- Surge Protection Device (SPD) Type 2, Type 3, and Type 4CA
- Ground Fault Circuit Interrupter (GFCI and AFCI)
- Smart E-meter
- Home automation and security systems: fire alarm, smoke detector

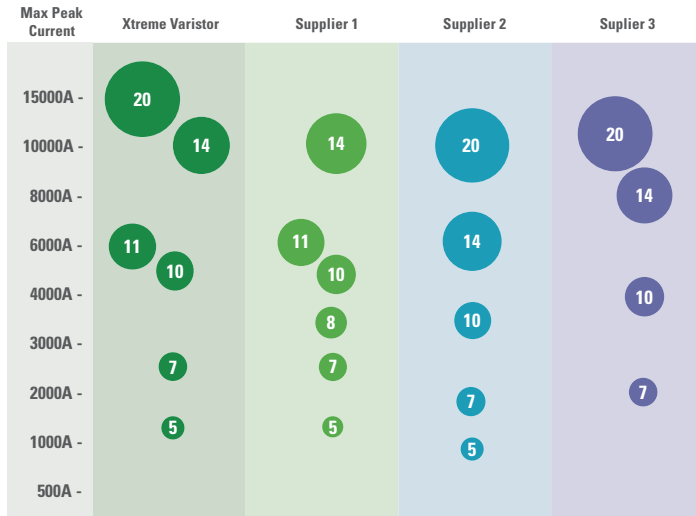
### Benefits

- More reliable and suitable for high operating temperature products
- Extend product reliability and lifespan
- Compliant with global safety standards
- Environment-friendly
- Suitable for operational environments requiring UL 94 V0 flammability rating

Xtreme provides an ideal circuit protection solution for middle and high voltage applications by offering higher surge ratings than ever before available in such small disc sizes.

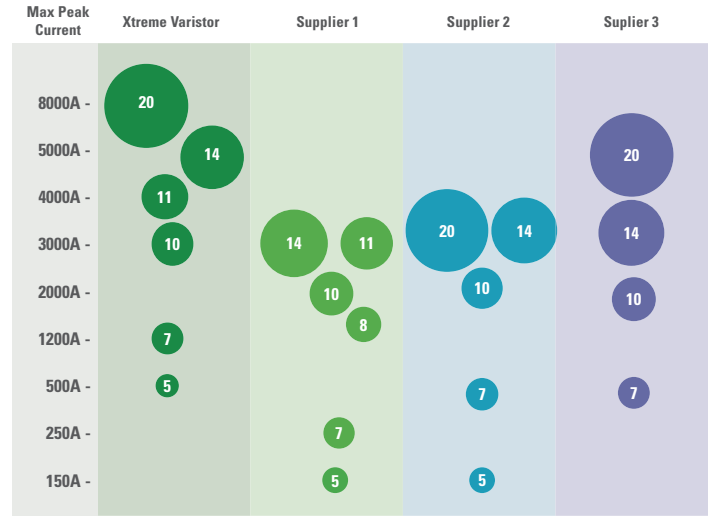
The extremely outstanding I<sub>max</sub> and I<sub>n</sub> surge capability can compete with the larger size that are mainstream in the market. For example, 20mm market mainstream parts can be replaced by Xtreme 14mm, it reduces end product weight and saves space.

### (I<sub>max</sub>) Surge Rating Comparison



\*Maximum Peak Current (I<sub>max</sub>) (One (1)x8/20 short circuit current surge) based on UL 1449

### (I<sub>n</sub>) Surge Rating Comparison



\*Nominal Discharge Current (I<sub>n</sub>) (Fifteen (15)x8/20 short circuit current surges) based on UL 1449

Nominal Size (MM)	Xtreme Varistor Series	Supplier 1	Supplier 2	Supplier 3	Xtreme Varistor Series	Supplier 1	Supplier 2	Supplier 3	Xtreme Varistor Series	Supplier 1	Supplier 2	Supplier 3
Maximum Peak Current (8/20, 1 x Pulse) I <sub>max</sub> (A)					Nominal Discharge Current (8/20, 15 x Pulses) I <sub>n</sub> (A)				Maximum Operating Temperature			
5	1,200	1,200	800	NA	500	150	150	NA	-40°C ~ +125°C	-40°C ~ +85°C	-40°C ~ +105°C	-40°C ~ +105°C
7	2,500	2,500	1,750	1,800	1,200	250	500	500				
10	4,500	4,500	3,500	4,000	3,000	2,000	2,000	2,000				
11	6,000	6,000	NA	NA	4,000	3,000	NA	NA				
14	10,000	10,000	6,000	8,000	5,000	3,000	3,000	3,000				
20	15,000	NA	10,000	13,000	8,000	NA	3,000	5,000				
8	NA	3,500	NA	NA	NA	1,500	NA	NA				

### Key advantages over other suppliers:

- Higher Maximum Peak Current (8/20, 1 x Pulse) I<sub>max</sub> (A)
- Higher Nominal Discharge Current (8/20, 15 x Pulses) I<sub>n</sub> (A)
- Higher Maximum Operating Temperature