

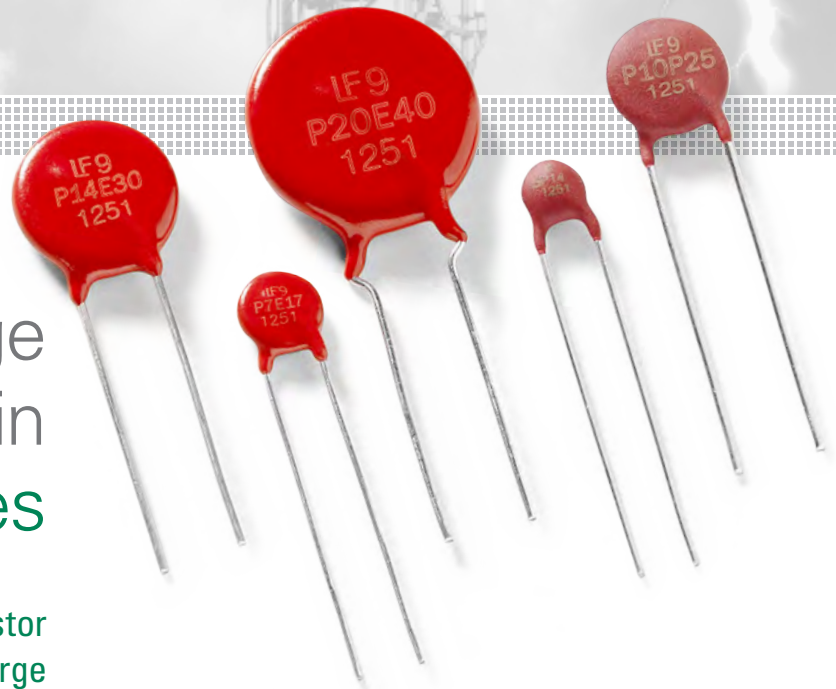
4x
GREATER
SURGE PROTECTION



Superior Peak Surge Current Ratings in Small Disc Sizes

Littelfuse LV UltraMOV™ Varistor
Series offers 4x greater surge
withstanding capability than existing
technologies on the market today

The Littelfuse LV UltraMOV™ Series Varistor is designed with a new, proprietary formulation that can provide higher surge ratings up to 10kA with a smaller volume of material used per energy unit. It features a wide VAC voltage range of 11V to 95V, and VDC voltage range of 14V to 125V.



Applications

- Telecom Power Systems
- Surge Protection Devices
- Automation Controls
- Audio and Video Devices
- Security Systems
- Wireless Base Stations
- Fire Alarm Systems



Datasheet



Resources



Samples

LV UltraMOV™ Varistor Series provides 4X greater surge protection for low DC voltage applications in the smallest package



Epoxy Coated



Phenolic Coated

Features

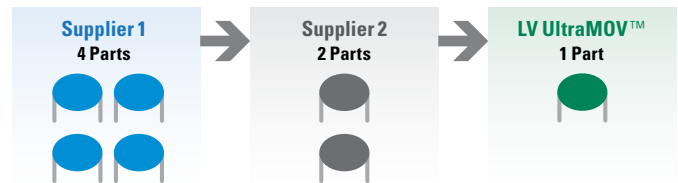
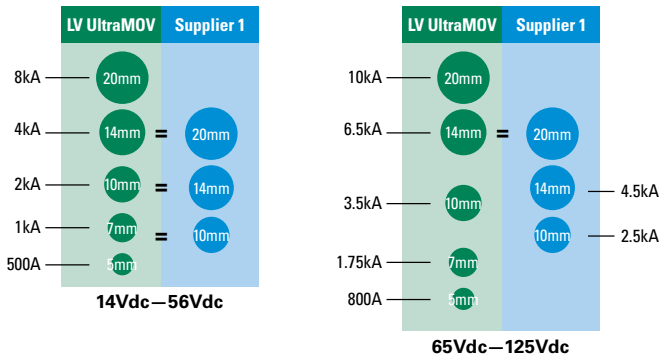
- Breakthrough in low voltage varistor design provides 4X greater surge protection (14Vdc - 56Vdc)
- Reduced footprint and volume required for surge protection
- High energy absorption capability
- Optional phenolic coating
- Lead-free, halogen-free, and RoHS compliant

Benefits

- Increased long-term reliability due to the ability to handle higher surges over the end product's lifetime
- More board space is available for higher value functional components
- Lower weight and cost for end product from use of a smaller disc
- Higher operating temperature range—up to 125°C
- Environmentally friendly product

LV UltraMOV™ Varistor Series Reduces Varistor Disc Size

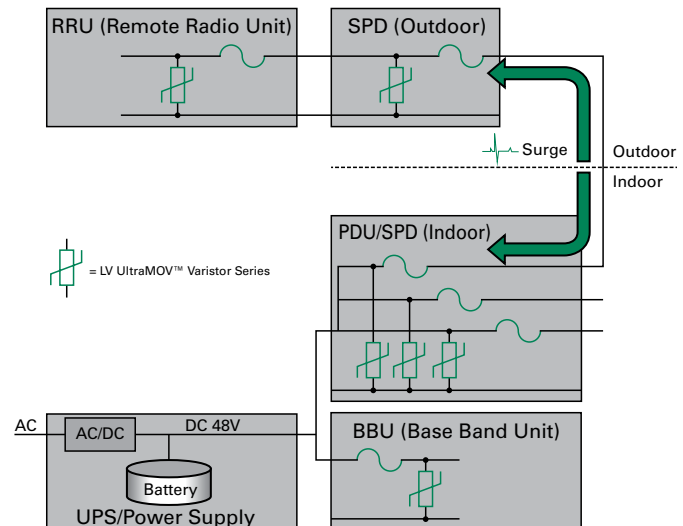
The LV UltraMOV™ Varistor Series delivers the same peak surge rating in a disc that's half the size of other technologies on the market.



LV UltraMOV™ Varistor Series can help circuit designers reduce counts based on the total surge level, thereby reducing the footprint and volume required for surge protection.

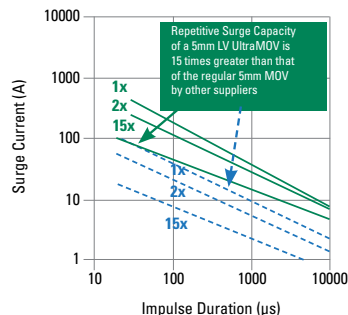
LV UltraMOV™ Varistor Series protects Base Transceiver Station (BTS) without occupying too much space

Induced by nearby lightning strikes, surge transients on DC power networks affect telecom equipment like Baseband Units, Remote Radio Units, and Power Distribution Units. With its enhanced surge withstand capability, the LV UltraMOV™ Varistor Series protects equipment from surge events in smaller component sizes, reducing component count.



Higher surge rating for the same size disc with Littelfuse LV UltraMOV™ Varistor Series

LV UltraMOV™ Varistor Series improves the reliability of the varistor by enhancing the surge withstanding capability of the varistor device. For example, a 5mm LV UltraMOV™ Varistor Series can withstand 15 times as many 100A 8x20μs surges as other 5mm varistors currently available.



Diameter (mm)	VRMS (V)	Vdc (V)	LV UltraMOV™ Varistor Series		Supplier 1		Supplier 2	
			I _{max} (8/20) (A)	W _{max} (2ms) (J)	I _{max} (8/20) (A)	W _{max} (2ms) (J)	I _{max} (8/20) (A)	W _{max} (2ms) (J)
5	11	14	500	0.8	100	0.3	250	0.4
7	11	14	1000	2.0	250	0.8	500	0.9
10	11	14	2000	4.2	500	1.7	1000	2.2
14	11	14	4000	8	1000	3.2	2000	4.3
20	11	14	8000	25	2000	10	3000	12