





Superior Peak Surge Current Ratings in Small Disc Sizes

> Littelfuse LV UltraMOV™ Series Varistor 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 with a smaller volume of material used per energy unit. It features a wide VAC voltage range of 11V to 40V, and VDC voltage range of 14V to 56V.

## **Applications**

- Telecom Power Systems
- Surge Protection Devices
- Automation Controls
- Audio Devices
- Security Systems
- Wireless Base Stations







tasheet Resources

Samples



# LV UltraMOV 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
- Reduced footprint and volume required for surge protection
- · High energy absorption capability
- · High resistance to temperature cycling
- 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 surge handling density in critical surge protection device module solutions
- Higher operating temperature range—up to 125°C

In the

**Smallest** 

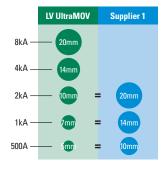
**Package** 

**Available** 

Environmentally friendly product

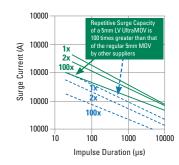
## How does LV UltraMOV reduce varistor disc size?

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



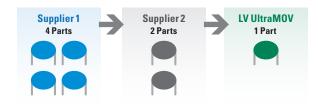
## Higher surge rating for the same size disc

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



## LV UltraMOV reduces counts for design engineers

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



## Higher surge rating for the same size disc with Littelfuse LV UltraMOV

Diameter (mm)	VRMS (V)	VOC (V)	Littelfuse LV UltraMOV Series				Supplier 1		Supplier 2	
			P/N (Max. Op. Temp. 85°C)	P/N (Max. Op. Temp. 125°C)	lmax (8/20) (A)	Wmax (2ms0) (J)	lmax (8/20) (A)	Wmax (2ms0) (J)	Imax (8/20) (A)	Wmax (2ms0) (J)
5	11	14	V05E11P	V05P11P	500	2	100	0.3	250	0.4
7	11	14	V07E11P	V07P11P	1000	4	250	0.8	500	0.9
10	11	14	V10E11P	V10P11P	2000	8	500	1.7	1000	2.2
14	11	14	V14E11P	V14P11P	4000	22	1000	3.2	2000	4.3
20	11	14	V20E11P	V20P11P	8000	35	2000	10	3000	12

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