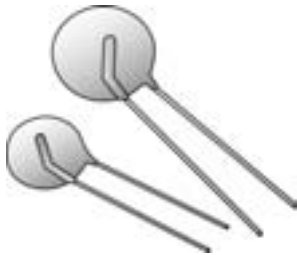


LITTELFUSE Varistors



Symbol	DIMENSIONS: mm (IN.)			
	7mm	10mm	14mm	20mm
A (max)	12.0 (.472)	16.0 (.630)	20.0 (.787)	26.5 (1.043)
D (max)	9.0 (.354)	12.5 (.492)	17.0 (.669)	23.0 (.906)
+ 1mm e -.039)	6.0 (.236)	8.5 (.335)	8.5 (.335)	8.5 (.335)

DIMENSIONS: mm (IN)	
	25.4mm (1 in.) Min.
14 and 20mm Models .81 ± .05 (.032 ± .002)	7mm Models .635 ± .05 (.025 ± .002)

LITTELFUSE METAL OXIDE VARISTORS ZA SERIES

The ZA Series of transient voltage surge suppressors are radial-lead varistors (MOV's) designed for use in the protection of low and medium voltage circuits and systems. Typical applications include motor control, telecom, automotive systems, solenoid, and power supply circuits to protect circuit board components and maintain data integrity.

Features:

- Wide Operating Voltage Range Vm (AC) MS: 4V to 460V
- DC Voltage Ratings: 5.5V to 615V
- No Derating up to 85°C Ambient
- 5 Model Sizes Available: 5,7,10,14 and 20mm
- Radial-Lead Package Design



*Energy rating for impulse duration of 30ms minimum to one half of peak current (auto load dump).

**10mA DC test current.

For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.		Model Size Disc Dia. (mm)	Device Model Number Brand	Maximum Ratings (85°C)				Specifications (25°C)				Typical Capaci- tance f=1MHz	Price Each			
				Continuous		Transient		Varistor Voltage @ 1mA DC Test Current		Max. Clamping Voltage 8 x 20µs						
				V _{RMS}	V _{DC}	Energy (10/1000µs)	Peak Cur. (8/20µs)									
				V _M (AC)	V _M (DC)	W _{TM}	I _{TM}	V _{NOM} Min.	V _{NOM} Max.	V _C	I _{PK}		C			
Mfr.	Mfr. Part No.			Volts	Volts	Joules	Amps	Volts	Volts	Volts	Amps	pF	1	50	100	500
570—V8ZA1		7	08Z1	4	5.5	0.4	100	11	22	2.5	2.5	3000	.36	.30	.21	.18
570—V8ZA2		10	08Z2	4	5.5	0.8	250	6	11	20	5	7500	.44	.37	.26	.22
570—V18ZA05		5	Z18	10	14	0.17	100	14.4	21.6	36	1	1000	.44	.37	.26	.22
570—V18ZA1		7	18Z1	10	14	0.08	250	14.4	21.6	36	2.5	2000	.40	.33	.23	.20
570—V22ZA05		5	Z22	14	18	0.2	100	18.7	26	43	1	800	.32	.27	.19	.16
570—V22ZA1		7	22Z1	14	18	0.9	250	18.7	26	43	2.5	1600	.32	.27	.19	.16
570—V22ZA2		10	22Z2	14	18	2	500	18.7	26	43	5	4000	.48	.40	.28	.24
570—V22ZA3		14	22Z3	14	18	4	1000	18.7	26	43	10	9000	.64	.53	.37	.32
570—V33ZA1		7	33Z1	20	26	1.2	250	29.5	36.5	65	2.5	1100	.32	.27	.19	.16
570—V33ZA5		14	33Z5	20	26	6	1000	29.5	36.5	65	10	6000	.64	.53	.37	.32
570—V36ZA80		20	36Z80	23	31	160*	2000	32**	40	63	20	12000	.88	.73	.51	.44
570—V39ZA1		7	39Z1	25	31	1.2	250	35	43	79	2.5	1100	.32	.27	.19	.16
570—V39ZA6		14	39Z6	25	31	6	1000	35	43	76	10	6000	.64	.53	.37	.32
570—V47ZA1		7	47Z1	30	38	1.8	250	42	52	93	2.5	800	.32	.27	.19	.16
570—V47ZA3		10	47Z3	30	38	4.5	500	42	52	93	5	2000	.44	.37	.26	.22
570—V47ZA7		14	47Z7	30	38	8.8	1000	42	52	93	10	4500	.64	.53	.37	.32
570—V47ZA20		20	47Z20	30	38	23	2000	42	52	93	20	11000	.88	.73	.51	.44
570—V56ZA2		7	56Z2	35	45	2.3	250	50	62	110	2.5	700	.32	.27	.19	.16
570—V56ZA8		14	56Z8	35	45	10	1000	50	62	110	10	3900	.64	.53	.37	.32
570—V68ZA05		5	Z68	40	56	0.6	100	61	80	135	1	300	.32	.27	.19	.16
570—V68ZA2		7	68Z2	40	56	3	250	61	75	135	2.5	600	.32	.27	.19	.16
570—V68ZA10		14	68Z10	40	56	13	1000	61	75	135	10	3300	.61	.51	.36	.30
570—V82ZA2		7	82Z2	50	68	4	1200	73	91	135	10	500	.32	.27	.19	.16
570—V82ZA4		10	82Z4	50	68	8	2500	73	91	135	25	1100	.44	.37	.26	.22
570—V82ZA12		14	82Z12	50	68	15	4500	73	91	145	50	2500	.80	.67	.47	.40
570—V100ZA3		7	100Z	60	81	5	1200	90	110	165	10	400	.32	.27	.19	.16
570—V120ZA1		7	120Z	75	102	6	1200	108	132	205	10	300	.32	.27	.19	.16
570—V150ZA8		14	150Z8	95	127	20	4500	135	165	250	50	1400	.64	.53	.37	.32

LITTELFUSE METAL OXIDE VARISTORS LA SERIES

Littelfuse varistors are voltage dependent, symmetrical, metal-oxide semiconductor devices. Their characteristics enable them to protect against high transient voltage spikes (when properly selected) to meet anticipated loads. When the protected equipment or circuit encounters high voltage spikes, the varistor impedance changes from a very high standby value to a very low conducting value, thus clamping the transient voltage to a protective level. The excess energy of the incoming high voltage pulse is absorbed by the Harris varistor, protecting voltage sensitive components against damage.

Features:

- Wide voltage / energy range
- Low standby power
- Line voltage operation
- Excellent clamp ratio
- No follow-on current
- UL recognized
- Fast response time
- Radial package



For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.	Littelfuse Part No.	Model Size Disc Dia. (mm)	Device Model Number Brand	Maximum Ratings (85°C)				Specifications (25°)						Typical Capacitance @ f=1MHz (pF)	Price Each			
				Continuous		Transient		V _{NOM} Varistor Peak Voltage			Max. Clamping Voltage V _C @ Test Current (8x20µs)							
				RMS Voltage	DC Voltage	Energy (10/1000µs)	Peak Cur. (8/20µs)	Min.	Max @ 1mA DC	Max @ 1mA AC	V _C		I _p					
				Volts	Volts	Joules	Amps	Volts	Volts	Volts	Volts	Volts						
				Volts	Volts	Joules	Amps	Volts	Volts	Volts	Volts	Volts						
570-V130LA1	V130LA1	7	1301	130	175	7	800	184	255	273	390	10	180	.32	.30	.27	.26	
570-V130LA2	V130LA2	7	1302	130	175	10	1200	184	232	254	340	10	180	.36	.33	.31	.28	
570-V130LA10A	V130LA10A	14	130L10	130	175	35	4500	184	232	254	340	50	1000	.60	.54	.50	.47	
570-V130LA20A	V130LA20A	20	130L20	130	175	70	6500	184	232	254	340	100	1900	.79	.73	.67	.62	
570-V130LA20B	V130LA20B	20	130L20B	130	175	70	6500	184	220	238	325	100	1900	.82	.75	.69	.65	
570-V150LA1	V150LA1	7	1501	150	200	8	800	212	284	301	430	10	150	.36	.33	.31	.28	
570-V150LA2	V150LA2	7	1502	150	200	11	1200	212	268	282	395	10	150	.36	.33	.31	.28	
570-V150LA10A	V150LA10A	14	150L10	150	200	40	4500	212	268	282	395	50	800	.60	.54	.50	.47	
570-V150LA20A	V150LA20A	20	150L20	150	200	80	6500	212	268	282	395	100	1600	.79	.73	.67	.62	
570-V150LA20B	V150LA20B	20	150L20B	150	200	80	6500	212	243	255	360	100	1600	.82	.75	.69	.65	
570-V250LA2	V250LA2	7	2502	250	330	12	800	354	453	509	730	10	110	.39	.36	.33	.31	
570-V250LA4	V250LA4	7	2504	250	330	17	1200	354	429	472	650	10	110	.39	.36	.33	.31	
570-V250LA20A	V250LA20A	14	250L20	250	330	70	4500	354	429	472	650	50	500	.60	.54	.50	.47	
570-V250LA40A	V250LA40A	20	250L40	250	330	130	6500	354	429	472	650	100	1000	.79	.73	.67	.62	
570-V275LA2	V275LA2	7	2752	275	369	14	800	389	515	579	775	10	100	.39	.36	.33	.31	
570-V275LA20A	V275LA20A	14	275L20	275	369	75	4500	389	473	522	710	50	450	.60	.54	.50	.47	
570-V275LA40A	V275LA40A	20	275L40	275	369	140	6500	389	473	522	710	100	900	.79	.73	.67	.62	
570-V275LA40B	V275LA40B	20	275L40B	275	369	140	6500	389	473	495	680	100	900	.82	.75	.69	.65	
570-V300LA4	V300LA4	7	3004	300	405	22	1000	420	517	579	775	10	90	.43	.40	.37	.34	
570-V320LA20A	V320LA20A	14	320L20	320	420	90	4500	462	565	635	850	50	380	.74	.68	.63	.59	
570-V320LA40B	V320LA40B	20	320L40	320	420	160	6500	462	540	580	810	100	750	.95	.88	.81	.75	
570-V480LA40A	V480LA40A	14	480L40	480	640	105	4500	670	825	914	1240	50	450	.85	.78	.72	.66	
570-V480LA80B	V480LA80B	20	480L80	480	640	180	6500	670	790	878	1160	100	900	1.16	1.06	.98	.90	
570-V575LA40A	V575LA40A	14	575L40	575	730	120	4500	805	1000	1060	1500	50	370	1.16	1.06	.98	.90	
570-V575LA80B	V575LA80B	20	575L80	575	730	220	6500	805	960	1010	1410	100	750	1.58	1.45	1.33	1.24	

