

LITTELFUSE Metal Oxide Varistors



RoHS Compliant This product is RoHS compliant.

LITTELFUSE TMOV34S SERIES THERMALLY PROTECTED VARISTORS

- US Patent for thermally protected MOV
- Operating Temperature: -55°C to +85°C
- High peak current rating
- RoHS Compliant



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Littelfuse Part No.	Package/Case	ACV Max.	DCV Max.	Current Surge	Varistor Voltage	Number of Circuits	Price Each		
								1	10	100
576-TMOV34S151EP	TMOV34S151EP	34mm Square 2 Leaded	150	200	40kA	268	1	17.31	16.45	15.58
576-TMOV34S271EP	TMOV34S271EP	34mm Square 2 Leaded	275	369	40kA	473	1	17.31	16.45	15.58
576-TMOV34S321EP	TMOV34S321EP	34mm Square 2 Leaded	320	420	40kA	561	1	17.31	16.45	15.58

LITTELFUSE METAL OXIDE VARISTORS ZA SERIES

The ZA Series of transient voltage surge suppressors are radial-lead varistors (MOVs) 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.

- 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.



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MOUSER STOCK NO.	Model Size Disc Dia. (mm)	Device Model Number Brand	Maximum Ratings (85°C)				Specifications (25°C)					Typical Capacitance f=1MHz	Price Each			
			Continuous		Transient		Varistor Voltage @ 1mA DC Test Current		Max. Clamping Voltage 8 x 20µs		C		1	10	100	250
			V _{RMS}	V _{DC}	Energy (10/1000µs)	Peak Cur. (8/20µs)	V _{NOM} Min.	V _{NOM} Max.	V _C	I _{PK}						
			V _M (AC) Volts	V _M (DC) Volts	W _{TM} Joules	I _{TM} Amps	V _{NOM} Min. Volts	V _{NOM} Max. Volts	V _C Volts	I _{PK} Amps						
576-V8ZA05P	5	PZ08	4	5.5	0.1	50	6	11	30	1	2000	.26	.25	.23	.22	
576-V8ZA1P	7	P08Z1	4	5.5	0.4	100	6	11	22	2.5	4190	.26	.25	.23	.22	
576-V8ZA2P	10	P08Z2	4	5.5	0.8	250	6	11	20	5	7000	.24	.23	.21	.20	
576-V12ZA05P	5	PZ12	6	8	0.14	50	9	16	37	1	1700	.26	.25	.229	.22	
576-V12ZA2P	10	P12Z2	6	8	1.2	250	9	16	30	5	6100	.24	.23	.21	.20	
576-V18ZA05P	5	PZ18	10	14	0.17	100	14.4	21.6	36	1	1400	.24	.23	.21	.20	
576-V18ZA1P	7	P18Z1	10	14	0.8	250	14.4	21.6	36	2.5	2700	.24	.23	.21	.20	
576-V18ZA2P	10	P18Z2	10	14	1.5	500	14.4	21.6	36	5	5300	.24	.23	.21	.20	
576-V18ZA3P	14	P18Z3	10	14	3.5	1000	14.4	21.6	36	10	18870	.31	.28	.27	.25	
576-V18ZA40P	20	P18Z40	10	14	80	2000	14.4	21.6	37	20	22000	.48	.44	.42	.40	
576-V22ZA05P	5	PZ22	14	18	0.2	100	18.7	26	43	1	1220	.17	.16	.15	.145	
576-V22ZA1P	7	P22Z1	14	18	0.9	250	18.7	26	43	2.5	2375	.17	.16	.15	.145	
576-V22ZA2P	10	P22Z2	14	18	2	500	18.7	26	43	5	4500	.24	.23	.21	.20	
576-V22ZA3P	14	P22Z3	14	18	4	1000	18.7	26	43	10	14730	.39	.37	.35	.33	
576-V24ZA50P	20	P24Z50	14	18	100	2000	19.2	26	43	20	18000	.48	.44	.42	.40	
576-V27ZA05P	5	PZ27	17	22	0.25	100	23	31.1	53	1	920	.17	.16	.15	.145	
576-V47ZA20P	20	P47Z20	30	38	23	2000	42	52	93	20	11000	.48	.44	.42	.40	
576-V47ZA7P	14	P47Z7	30	38	8.8	1000	42	52	93	10	6270	.31	.28	.27	.25	
576-V47ZA3P	10	P47Z3	30	38	4.5	500	42	52	93	5	2590	.24	.22	.198	.182	
576-V56ZA2P	7	P56Z2	35	45	2.3	250	50	62	110	2.5	1035	.17	.16	.15	.145	
576-V56ZA8P	14	P56Z8	35	45	10	1000	50	62	110	10	4840	.31	.28	.27	.25	
576-V68ZA2P	7	P68Z2	40	56	3	250	61	75	135	2.5	910	.17	.16	.15	.145	
576-V68ZA3P	10	P68Z3	40	56	6.5	500	61	75	135	5	1850	.24	.23	.21	.20	
576-V68ZA10P	14	P68Z10	40	56	13	1000	61	75	135	10	3870	.31	.28	.27	.25	
576-V82ZA4P	10	P82Z4	50	68	8	2500	73	91	135	25	1485	.42	.38	.36	.34	
576-V82ZA12P	14	P82Z12	50	68	15	4500	73	91	145	50	3380	.39	.37	.35	.33	
576-V100ZA3P	5	PZ100	60	81	2.5	400	90	117	165	5	600	.17	.16	.15	.145	
576-V100ZA15P	14	P100Z15	60	81	20	4500	90	110	175	50	2900	.31	.29	.27	.26	
576-V150ZA20P	20	P150Z20	95	127	45	6500	135	165	250	100	3500	.48	.44	.42	.40	
576-V180ZA1P	7	P180Z	115	153	10	1200	162	198	300	10	320	.17	.16	.15	.145	
576-V180ZA5P	10	P180Z5	115	153	18	2500	162	198	300	25	465	.24	.23	.21	.20	
576-V180ZA10P	14	P180Z10	115	153	35	4500	162	198	300	50	1190	.30	.28	.27	.25	
576-V220ZA05P	5	PZ220	140	180	6	400	198	253	360	5	95	.32	.31	.29	.28	
576-V330ZA05P	5	PZ330	210	275	9	400	297	380	540	5	70	.32	.31	.29	.28	
576-V390ZA05P	5	PZ390	250	330	10	400	351	449	650	5	80	.32	.31	.29	.28	

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.

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



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Model Size Disc Dia. (mm)	Device Model Number Brand	Maximum Ratings (85°C)				Specifications (25°C)					Typical Capacitance @ f=1MHz (pF)	Price Each			
			Continuous		Transient		V _{NOM} Varistor Peak Voltage		Max. Clamping Voltage VC @ Test Current (8 x 20µs)		C		1	10	100	250
			RMS Voltage	DC Voltage	Energy (10/1000µs)	Peak Cur. (8/20µs)	Max. @ 1mA DC	Max. @ 1mA AC	V _C	I _p						
			Volts	Volts	Joules	Amps	Volts	Volts	Volts	Amps						
576-V130LA1P	7	P1301	130	175	11	1200	184	255	390	10	180	.17	.16	.15	.145	
576-V130LA2P	7	P1302	130	175	11	1200	184	228	340	10	180	.17	.16	.15	.145	
576-V130LA5P	10	P1305	130	175	20	2500	184	228	340	25	4500	.24	.23	.21	.20	
576-V130LA10AP	14	P130L10	130	175	38	4500	184	228	340	50	1000	.30	.28	.27	.25	
576-V130LA20AP	20	P130L20	130	175	70	6500	184	228	340	100	1900	.48	.44	.425	.40	
576-V130LA20BP	20	P130L20B	130	175	70	6500	184	220	325	100	1900	.48	.44	.425	.40	
576-V140LA5P	10	P1405	140	180	22	2500	198	242	360	25	400	.24	.22	.21	.20	
576-V140LA10AP	14	P140L10	140	180	42	4500	198	242	360	50	900	.31	.28	.27	.25	
576-V150LA1P	7	P1501	150	200	13	1200	212	284	430	10	150	.17	.16	.15	.145	
576-V150LA2P	7	P1502	150	200	13	1200	212	268	395	10	150	.17	.16	.14	.13	
576-V150LA5P	10	P1505	150	200	25	2500	212	268	395	25	360	.24	.23	.224	.21	
576-V150LA10AP	14	P150L10	150	200	45	4500	212	268	395	50	800	.31	.28	.27	.25	
576-V150LA20AP	20	P150L20	150	200	80	6500	212	268	395	100	1600	.48	.44	.42	.40	
576-V150LA20BP	20	P150L20B	150	200	80	6500	212	243	360	100	1600	.48	.44	.42	.40	
576-V250LA10P	10	P250L	250	330	40	2500	354	429	650	25	220	.24	.23	.21	.20	
576-V275LA2P	7	P275L	275	369	23	1200	389	515	775	10	80	.17	.16	.15	.145	
576-V275LA40AP	20	P275L40	275	369	140	6500	389	473	710	100	900	.48	.44	.42	.40	
576-V275LA40BP	20	P275L40B	275	369	140	6500	389	453	680	100	900	.48	.44	.42	.40	
576-V320LA20AP	14	P320L20	320	420	80	4500	462	565	850	50	380	.31	.28	.27	.25	
576-V320LA40BP	20	P320L40	320	420	150	6500	462	540	810	100	750	.48	.44	.42	.40	
576-V420LA20AP	14	P420L20	420	560	90	4500	610	748	1120	50	300	.31	.28	.27	.25	
576-V420LA40BP	20	P420L40	420	560	160	6500	610	720	1060	100	600	.56	.53	.51	.48	
576-V480LA40AP	14	P480L40	480	640	105	4500	670	825	1240	50	270	.42	.38	.36	.34	
576-V480LA80BP	20	P480L80	480	640	180	6500	670	790	1160	100	550	.65	.61	.58	.548	
576-V510LA40AP	14	P510L40	510	675	110	4500	735	910	1350	50	250	.65	.61	.58	.548	
576-V510LA80BP	20	P510L80	510	675	190	6500	735	860	1280	100	500	.82	.78	.74	.70	
576-V575LA40AP	14	P575L40	575	730	120	4500	805	1000	1500	50	220	.65	.61	.58	.548	
576-V575LA80BP	20	P575L80	575	730	220	6500	805	960	1410	100	450	1.08	1.02	.97	.911	
576-V1000LA160BP	20	P1000L160	1000	1200	360	6500	1425	1600	2420	100	250	2.05	1.95	1.84	1.73	