



SUPPRESSION

CKE Part Number	Marking On Part	Max Applied Contin. Volts		Varistor Voltage @ 1 mA DC	Energy 2ms Joules	Max. Clamping Voltage 8/20 μs		Peak Current Amps	Typical Capacitance pF	Dimensions (mm) - Figure 64			
		AC <sub>RMS</sub>	DC			Volts	Amps			D-Max	± 1 mm		
											T	W	d
Z5L180	180	11	14	18(16-20)	0.3	40	1	100	1600	7.5	3.5	5.0	0.6
Z5L220	220	14	18	22(20-24)	0.4	48	1	100	1300	7.5	3.5	5.0	0.6
Z5L270	270	17	22	27(24-30)	0.5	60	1	100	1050	7.5	3.5	5.0	0.6
Z5L330	330	20	26	33(30-36)	0.6	73	1	100	900	7.5	3.5	5.0	0.6
Z5L390	390	25	31	39(35-43)	0.8	86	1	100	500	7.5	3.5	5.0	0.6
Z5L470	470	30	38	47(42-52)	1.0	104	1	100	450	7.5	3.5	5.0	0.6
Z5L560	560	35	45	56(50-62)	1.0	123	1	100	400	7.5	3.5	5.0	0.6
Z5L680	680	40	56	68(61-75)	1.2	150	1	100	350	7.5	3.5	5.0	0.6
Z5L820	820	50	65	82(74-90)	1.7	145	5	400	250	7.5	3.5	5.0	0.6
⚡ Z5L101	101	60	85	100(90-110)	2.0	175	5	400	200	7.0	3.7	5.0	0.6
⚡ Z5L121	121	75	100	120(108-132)	2.5	210	5	400	170	7.0	3.8	5.0	0.6
⚡ Z5L151	151	95	125	150(135-165)	3.0	260	5	400	140	7.0	4.0	5.0	0.6
Z5L181	181	115	153	180(162-198)	3.5	300	5	400	100	7.0	4.1	5.0	0.6
Z5L201	201	130	170	200(185-225)	4.0	355	5	400	80	7.0	4.2	5.0	0.6
Z5L221	221	140	180	220(198-242)	4.5	380	5	400	70	7.0	4.3	5.0	0.6
Z5L241	241	150	200	240(216-264)	5.0	415	5	400	70	7.0	4.4	5.0	0.6
Z5L271	271	175	225	270(243-297)	6.0	475	5	400	60	7.0	4.6	5.0	0.6
Z5L331	331	210	275	330(297-363)	6.5	580	5	400	55	7.0	4.9	5.0	0.6
Z5L361	361	230	300	360(324-396)	7.5	620	5	400	50	7.0	5.1	5.0	0.6
Z5L391	391	250	320	390(351-429)	8.0	675	5	400	50	7.0	5.4	5.0	0.6
Z5L431	431	275	350	430(387-473)	9.0	745	5	400	45	7.0	5.7	5.0	0.6
Z5L471	471	300	385	470(423-517)	10.0	810	5	400	40	7.0	6.0	5.0	0.6
Z7L180	7L180	11	14	18(16-20)	0.8	36	2.5	250	3500	9.0	3.5	5.0	0.6
Z7L220	7L220	14	18	22(20-24)	0.9	43	2.5	250	2800	9.0	3.6	5.0	0.6
Z7L270	7L270	17	22	27(24-30)	1.0	53	2.5	250	2000	9.0	3.7	5.0	0.6
Z7L330	7L330	20	26	33(30-36)	1.2	65	2.5	250	1500	9.0	3.9	5.0	0.6
Z7L390	7L390	25	31	39(35-43)	1.5	77	2.5	250	1350	9.0	3.8	5.0	0.6
Z7L470	7L470	30	38	47(42-52)	1.8	90	2.5	250	1150	9.0	3.9	5.0	0.6
Z7L560	7L560	35	45	56(50-62)	2.3	105	2.5	250	950	9.0	4.0	5.0	0.6
Z7L680	7L680	40	56	68(61-75)	3.0	125	2.5	250	700	9.0	4.2	5.0	0.6
⚡ Z7L820	7L820	50	65	82(74-90)	4.0	135	10.0	1200	550	9.0	3.6	5.0	0.6
⚡ Z7L101	7L101	60	85	100(90-110)	5.0	165	10.0	1200	500	9.0	3.7	5.0	0.6
⚡ Z7L121	7L121	75	100	120(108-132)	6.0	200	10.0	1200	450	9.0	3.8	5.0	0.6
⚡ Z7L151	7L151	95	125	150(135-165)	8.0	250	10.0	1200	350	9.0	4.0	5.0	0.6
⚡ Z7L181	7L181	115	153	180(162-198)	10.0	300	10.0	1200	220	9.0	4.1	5.0	0.6
Z10L180	10L180	11	14	18(16-20)	1.5	36	5	500	7500	13.5	3.6	7.5	0.8
Z10L220	10L220	14	18	22(20-24)	2.0	43	5	500	6000	13.5	3.7	7.5	0.8
Z10L270	10L270	17	22	27(24-30)	2.5	53	5	500	4000	13.5	3.8	7.5	0.8
Z10L330	10L330	20	26	33(30-36)	3.0	65	5	500	3000	13.5	4.0	7.5	0.8
Z10L390	10L390	25	31	39(35-43)	3.5	77	5	500	2600	13.5	4.1	7.5	0.8
Z10L470	10L470	30	38	47(42-52)	4.5	90	5	500	2200	13.5	4.0	7.5	0.8
Z10L560	10L560	35	45	56(50-62)	5.5	105	5	500	1800	13.5	4.1	7.5	0.8
Z10L680	10L680	40	56	68(61-75)	6.5	125	5	500	1300	13.5	4.3	7.5	0.8
⚡ Z10L820	10L820	50	65	82(74-90)	8.0	135	25	2500	1800	13.5	4.0	7.5	0.8
⚡ Z10L101	10L101	60	85	100(90-110)	10.0	165	25	2500	1400	13.5	4.1	7.5	0.8
⚡ Z10L121	10L121	75	100	120(108-132)	12.0	200	25	2500	1100	13.5	4.2	7.5	0.8
⚡ Z10L151	10L151	95	125	150(135-165)	16.0	250	25	2500	900	13.5	4.5	7.5	0.8
⚡ Z10L181	10L181	115	153	180(162-198)	18.0	300	25	2500	550	13.5	4.5	7.5	0.8
Z15L180	Z15L180	11	14	18(16-20)	3.5	36	10	1000	18000	17.0	3.6	7.5	0.8
Z15L220	Z15L220	14	18	22(20-24)	4.0	43	10	1000	15000	17.0	3.7	7.5	0.8
Z15L270	Z15L270	17	22	27(24-30)	5.0	53	10	1000	10000	17.0	3.8	7.5	0.8
Z15L330	Z15L330	20	26	33(30-36)	6.0	65	10	1000	7500	17.0	4.0	7.5	0.8
Z15L390	Z15L390	25	31	39(35-43)	7.2	77	10	1000	6500	17.0	4.1	7.5	0.8
Z15L470	Z15L470	30	38	47(42-52)	8.8	90	10	1000	5500	17.0	4.0	7.5	0.8
Z15L560	Z15L560	35	45	56(50-62)	10.0	105	10	1000	4500	17.0	4.1	7.5	0.8
Z15L680	Z15L680	40	56	68(61-75)	13.0	125	10	1000	3300	17.0	4.3	7.5	0.8
⚡ Z15L820	Z15L820	50	65	82(74-90)	14.5	135	50	4500	2900	17.0	4.0	7.5	0.8
⚡ Z15L101	Z15L101	60	85	100(90-110)	20.0	165	50	4500	2400	17.0	4.1	7.5	0.8
⚡ Z15L121	Z15L121	75	100	120(108-132)	22.0	200	50	4500	1900	17.0	4.2	7.5	0.8
⚡ Z15L151	Z15L151	95	125	150(135-165)	30.0	250	50	4500	1500	17.0	4.5	7.5	0.8
⚡ Z15L181	Z15L181	115	153	180(162-198)	35.0	300	50	4500	1200	17.0	4.5	7.5	0.8
Z21L180	Z21L180	11	14	18(16-20)	10.0	36	20	2000	18000	23.0	4.1	10.0	1.0
Z21L220	Z21L220	14	18	22(20-24)	13.0	43	20	2000	15000	23.0	4.2	10.0	1.0
Z21L270	Z21L270	17	22	27(24-30)	15.0	53	20	2000	10000	23.0	4.3	10.0	1.0
Z21L330	Z21L330	20	26	33(30-36)	20.0	65	20	2000	7500	23.0	4.5	10.0	1.0
Z21L390	Z21L390	25	31	39(35-43)	24.0	77	20	2000	6500	23.0	4.5	10.0	1.0
Z21L470	Z21L470	30	38	47(42-52)	30.0	90	20	2000	5500	23.0	4.6	10.0	1.0
Z21L560	Z21L560	35	45	56(50-62)	35.0	105	20	2000	4500	23.0	4.7	10.0	1.0
Z21L680	Z21L680	40	56	68(61-75)	40.0	125	20	2000	3300	23.0	4.8	10.0	1.0
⚡ Z21L820	Z21L820	50	65	82(74-90)	27.0	135	100	6500	2900	23.0	4.5	10.0	1.0
⚡ Z21L101	Z21L101	60	85	100(90-110)	30.0	165	100	6500	2400	23.0	4.6	10.0	1.0
⚡ Z21L121	Z21L121	75	100	120(108-132)	40.0	200	100	6500	1190	23.0	4.7	10.0	1.0
⚡ Z21L151	Z21L151	95	125	150(135-165)	50.0	250	100	6500	1500	23.0	4.9	10.0	1.0
⚡ Z21L181	Z21L181	115	153	180(162-198)	60.0	300	100	6500	1200	23.0	4.9	10.0	1.0

Radial leaded MOVs having the Underwriters Laboratory Recognized Component Mark, ⚡, conform to UL 1414, UL1449 second edition and CSA class 222101. CKE's UL recognized parts are listed on file #E90510 Maximum Power Dissipation: 5 mm-0.1 watt; 7 mm-0.25 watt; 10 mm-0.4 watt; 14 mm-0.6 watt, 20 mm-1 watt. Typical response time is less than 15 nanoseconds.