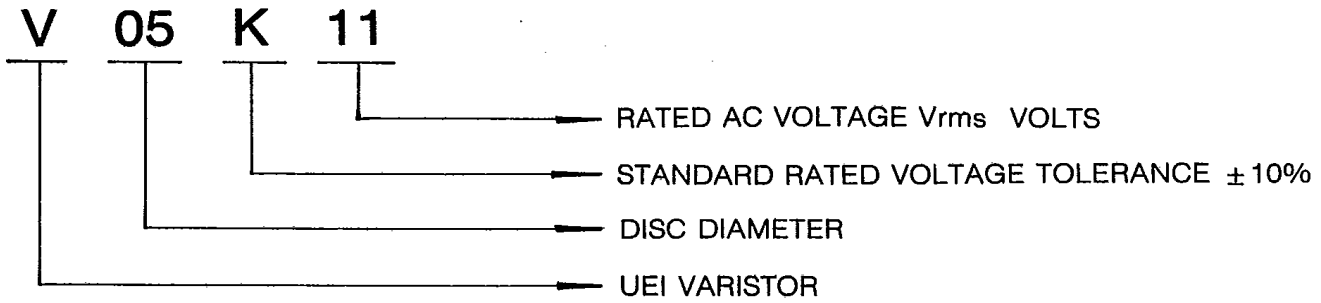


Metal Oxide Varistors

PART NUMBER CODE



SPECIFICATIONS

PART NO.	Rated Voltage		Varistor volt ($\pm 10\%$) DC Current	Max. Clamping Volt 8/20 μ s Test Current		Max. Surge Current 8/20 μ s.1 TIME	Max. Energy Absorption 10/1000 μ s	Max. Average Power Dissipation	Typical Capacitance @ 1KHz	
	AC	DC		V_c	IP					
	Vrms Volts	Vdc Volts	V_N (dc) Volts			Amps	I Max Amps	E Max Joules	W Max Watts	
V05K11 V07K11 V10K11 V14K11 V20K11	11	14	18	40 39 39 39 37	1 2.5 5 10 20	100 250 500 1000 2000	0.3 0.8 1.5 3.5 10.0	0.01 0.02 0.05 0.1 0.2	1700 3500 7000 14000 28000	
V05K14 V07K14 V10K14 V14K14 V20K14	14	18	22	48 43 43 43 44	1 2.5 5 10 20	100 250 500 1000 2000	0.4 0.9 2.0 4.0 13.0	0.01 0.02 0.05 0.1 0.2	1200 2500 5000 11000 22000	
V05K17 V07K17 V10K17 V14K17 V20K17	17	22	27	60 53 53 53 50	1 2.5 5 10 20	100 250 500 1000 2000	0.5 1.0 2.5 5.0 15.0	0.01 0.02 0.05 0.1 0.2	1100 2200 4500 9000 18000	
V05K20 V07K20 V10K20 V14K20 V20K20	20	26	33	73 64 64 64 58	1 2.5 5 10 20	100 250 500 1000 2000	0.6 1.2 3.0 6.0 20.0	0.01 0.02 0.05 0.1 0.2	1000 2000 4000 8000 16000	
V05K25 V07K25 V10K25 V14K25 V20K25	25	31	39	86 76 76 76 80	1 2.5 5 10 20	100 250 500 1000 2000	0.8 1.5 3.5 7.0 24.0	0.01 0.02 0.05 0.1 0.2	800 1600 3200 6500 13000	
V05K30 V07K30 V10K30 V14K30 V20K30	30	38	47	104 89 89 89 94	1 2.5 5 10 20	100 250 500 1000 2000	1.0 1.8 4.5 8.5 30.0	0.01 0.02 0.05 0.1 0.2	700 1400 2800 5500 11000	
V05K35 V07K35 V10K35 V14K35 V20K35	35	45	56	123 110 110 110 110	1 2.5 5 10 20	100 250 500 1000 2000	1.0 2.2 5.5 10 35	0.01 0.02 0.05 0.1 0.2	600 1300 2500 5000 10000	
V05K40 V07K40 V10K40 V14K40 V20K10	40	56	68	150 135 135 135 135	1 2.5 5 10 20	100 250 500 1000 2000	1.2 2.5 6.5 12 40	0.01 0.02 0.05 0.1 0.2	500 1000 2000 4000 8000	
V05K50 V07K50 V10K50 V14K50 V20K50	50	66	82	145 135 135 135 135	5 10 25 50 100	400 1200 2500 4500 6500	1.7 3.5 8.0 14.0 27.0	0.1 0.25 0.4 0.6 1.0	400 800 1500 3000 6000	
V05K60 V07K60 V10K60 V14K60 V20K60	60	85	100	175 165 165 165 165	5 10 25 50 100	400 1200 2500 4500 6500	2.0 4.0 10.0 18.0 30.0	0.1 0.25 0.4 0.6 1.0	350 700 1500 3000 6000	

Metal Oxide Varistors

SPECIFICATIONS

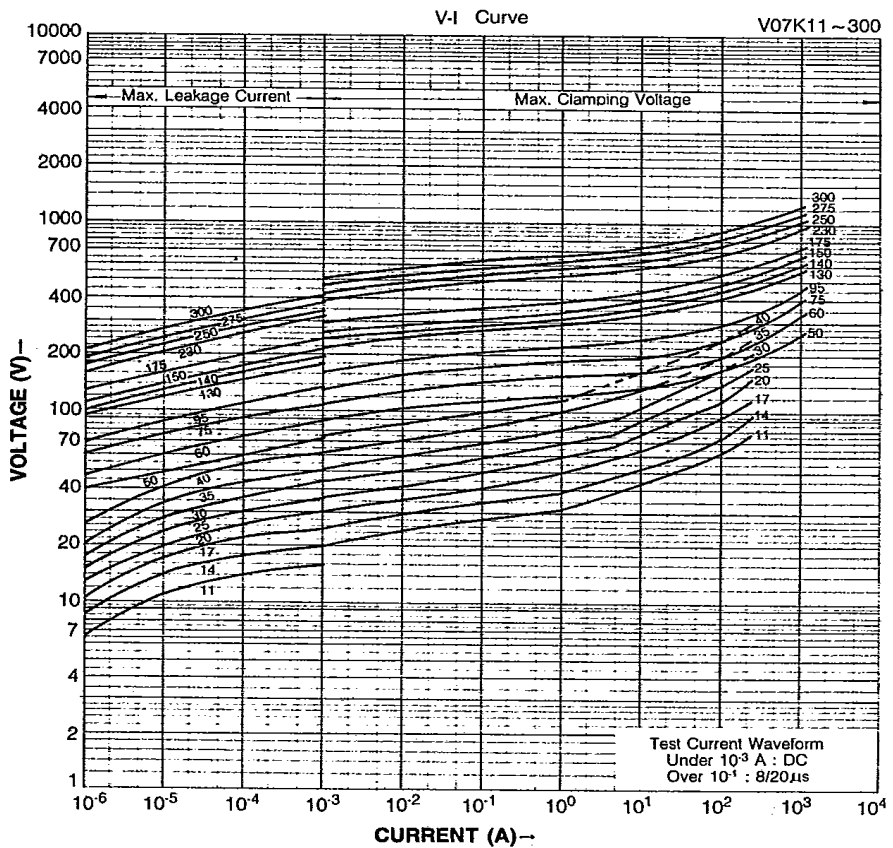
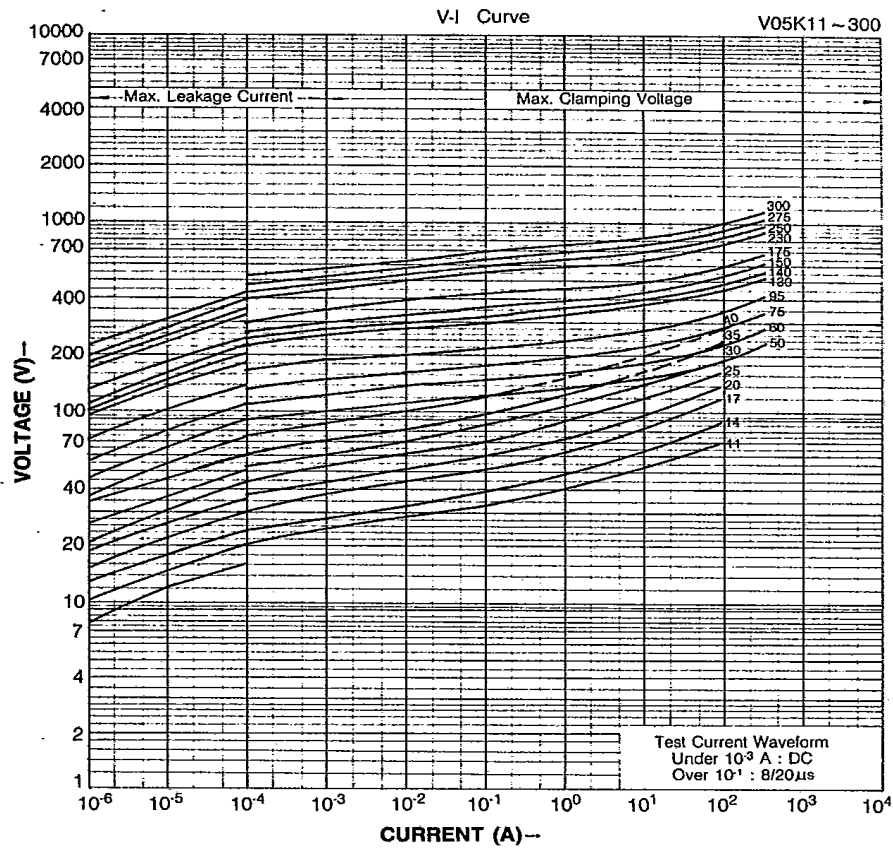
PART NO.	Rated Voltage		Varistor volt (± 10%) DC Current	Max. Clamping Volt 8/20µs Test Current		Max. Surge Current 8/20µs.1 TIME	Max. Energy Absorption 10/1000 µs	Max. Average Power Dissipation	Typical Capacitance @ 1KHz
	AC	DC		V _C	I _P				
	Vrms	Vdc	V _N (dc)			Amps			
	Volts	Volts	Volts	Volts	Amps	Amps	Joules	Watts	Picofarads
V05K75 V07K75 V10K75 V14K75 V20K75	75	102	120	210 200 200 200 200	5 10 25 50 100	400 1200 2500 4500 6500	2.5 5.0 12.0 20.0 40.0	0.1 0.25 0.4 0.6 1.0	350 700 1300 2600 5200
V05K95 V07K95 V10K95 V14K95 V20K95	95	127	150	260 250 250 250 250	5 10 25 50 100	400 1200 2500 4500 6500	3.0 6.0 16.0 25.0 50.0	0.1 0.25 0.4 0.6 1.0	250 500 1000 2000 4000
V05K130 V07K130 V10K130 V14K130 V20K130	130	175	200	355 340 340 340 340	5 10 25 50 100	400 1200 2500 4500 6500	4.0 10.0 20.0 35.0 70.0	0.1 0.25 0.4 0.6 1.0	200 400 800 1600 3200
V05K140 V07K140 V10K140 V14K140 V20K140	140	180	220	380 360 360 360 360	5 10 25 50 100	400 1200 2500 4500 6500	4.5 10.0 23.0 40.0 75.0	0.1 0.25 0.4 0.6 1.0	170 350 700 1400 2800
V05K150 V07K150 V10K150 V14K150 V20K150	150	200	240	415 395 395 395 395	5 10 25 50 100	400 1200 2500 4500 6500	5.0 10.0 25.0 40.0 80.0	0.1 0.25 0.4 0.6 1.0	170 350 700 1300 2600
V05K175 V07K175 V10K175 V14K175 V20K175	175	225	270	475 455 455 455 455	5 10 25 50 100	400 1200 2500 4500 6500	6.0 12.0 30.0 50.0 90.0	0.1 0.25 0.4 0.6 1.0	150 300 600 1200 2400
V05K230 V07K230 V10K230 V14K230 V20K230	230	300	360	620 595 595 595 595	5 10 25 50 100	400 1200 2500 4500 6500	7.5 15.0 35.0 65.0 120.0	0.1 0.25 0.4 0.6 1.0	120 250 500 1000 2000
V05K250 V07K250 V10K250 V14K250 V20K250	250	330	390	675 650 650 650 650	5 10 25 50 100	400 1200 2500 4500 6500	8.0 17.0 40.0 70.0 130.0	0.1 0.25 0.4 0.6 1.0	110 220 450 900 1800
V05K275 V07K275 V10K275 V14K275 V20K275	275	370	430	745 710 710 710 710	5 10 25 50 100	400 1200 2500 4500 6500	9.0 20.0 45.0 75.0 140.0	0.1 0.25 0.4 0.6 1.0	100 200 400 800 1600
V05K300 V07K300 V10K300 V14K300 V20K300	300	405	470	810 775 775 775 775	5 10 25 50 100	400 1200 2500 4500 6500	10.0 20.0 45.0 80.0 150.0	0.1 0.25 0.4 0.6 1.0	80 170 350 700 1400
V10K385 V14K385 V20K385	385	505	620	1025 1025 1025	25 50 100	2500 4500 6500	45.0 85.0 150.0	0.4 0.6 1.0	270 550 1100
V10K420 V14K420 V20K420	420	560	680	1120 1120 1120	25 50 100	2500 4500 6500	45.0 90.0 160.0	0.4 0.6 1.0	250 500 1000
V10K460 V14K460 V20K460	460	615	750	1240	25 50 100	2500 4500 6500	50 100 175	0.4 0.6 1.0	220 450 900
V10K510 V14K510 V20K510	510	675	820	1355	25 50 100	2500 4500 6500	55 110 190	0.4 0.6 1.0	220 440 880
V10K550 V14K550 V20K550	550	745	910	1500	25 50 100	2500 4500 6500	60 120 215	0.4 0.6 1.0	180 380 750
V10K625 V14K625 V20K625	625	825	1000	1650	25 50 100	2500 4500 6500	65 130 230	0.4 0.6 1.0	180 350 700

Note * Varistor Voltage: 5 Series — V_{0.1} mA
7,10,14,20 Series — V₁ mA

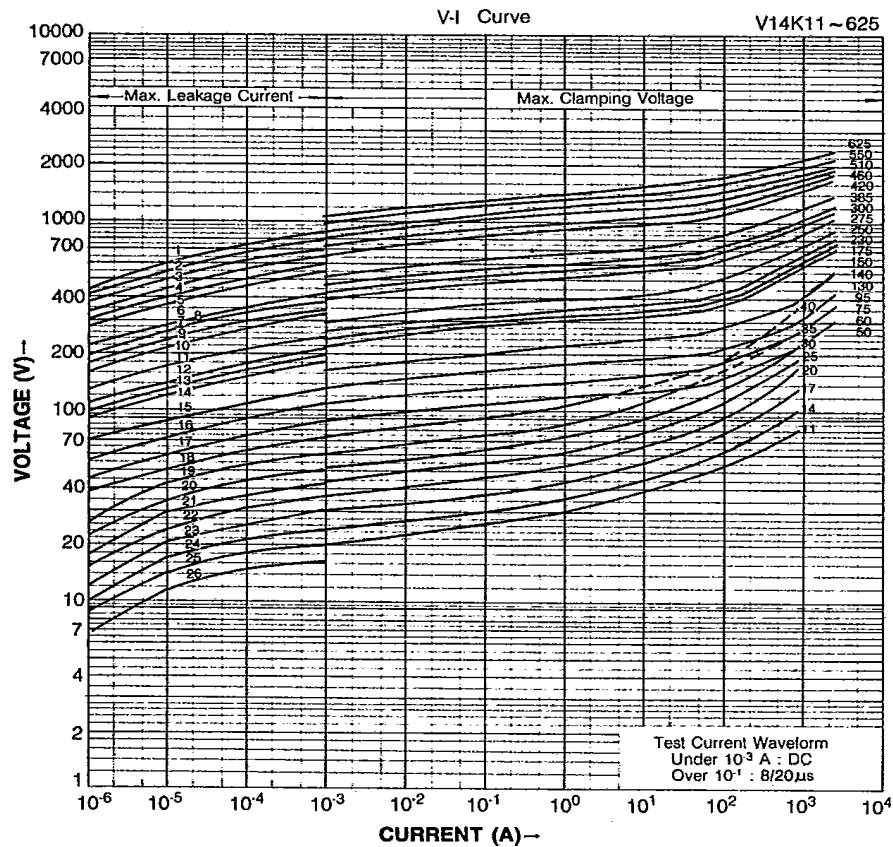
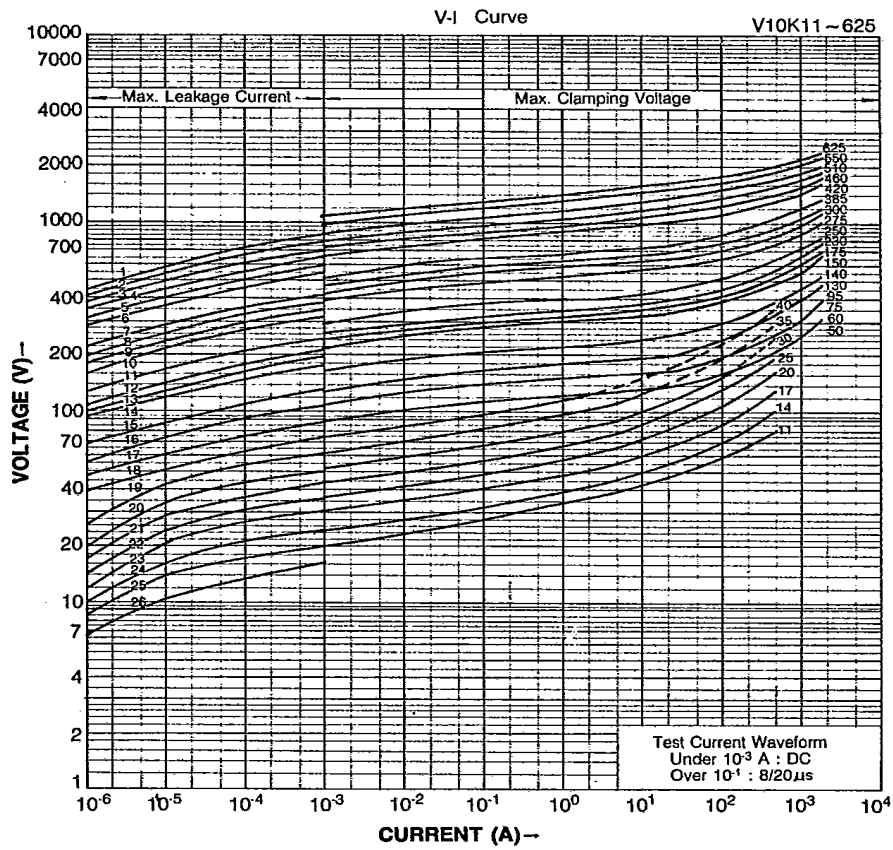
Metal Oxide Varistors

V - I CHARACTERISTICS

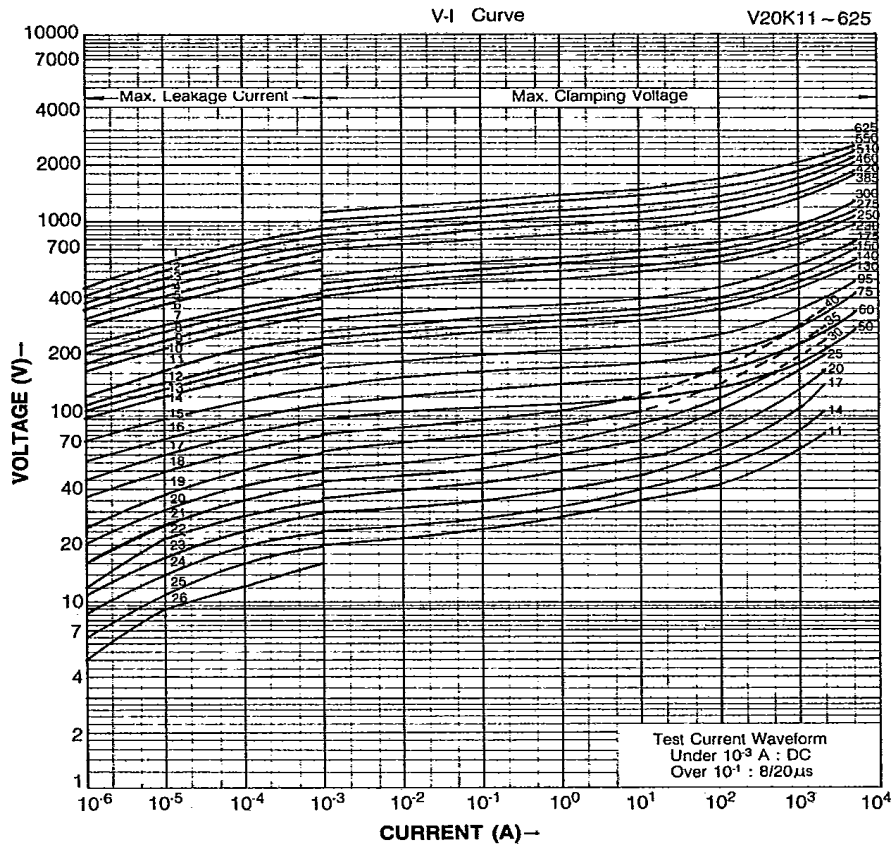
The V-I Characteristics of UEI's various series are shown in the following log-log scale. The maximum leakage current is shown on the left of the discontinuity and the maximum clamping voltage for a given surge current value is shown on the right of the discontinuity.



Metal Oxide Varistors

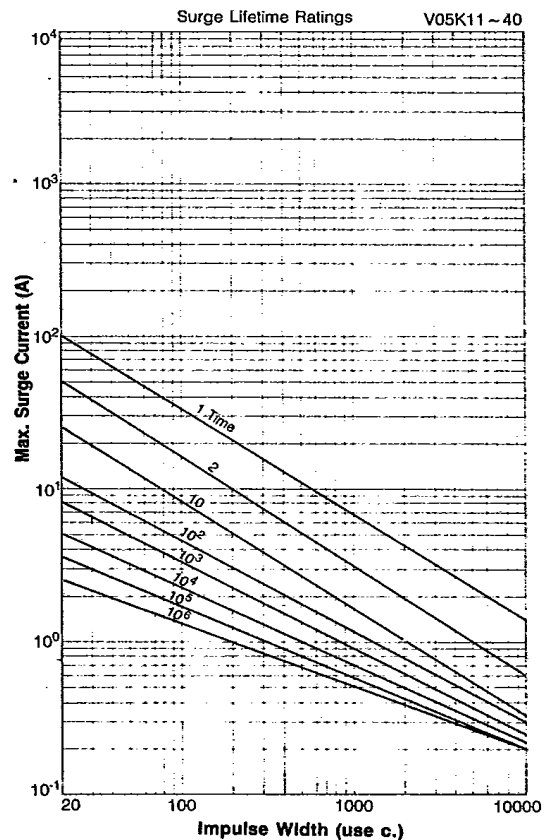


Metal Oxide Varistors

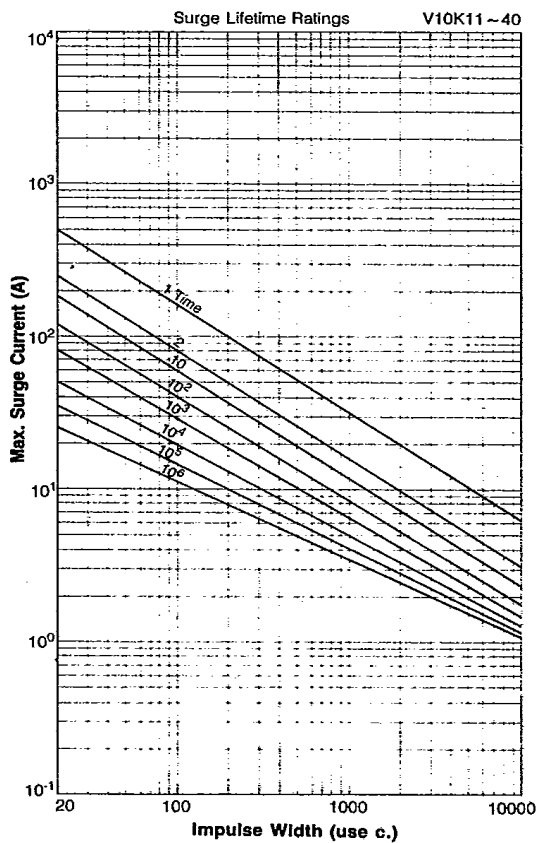
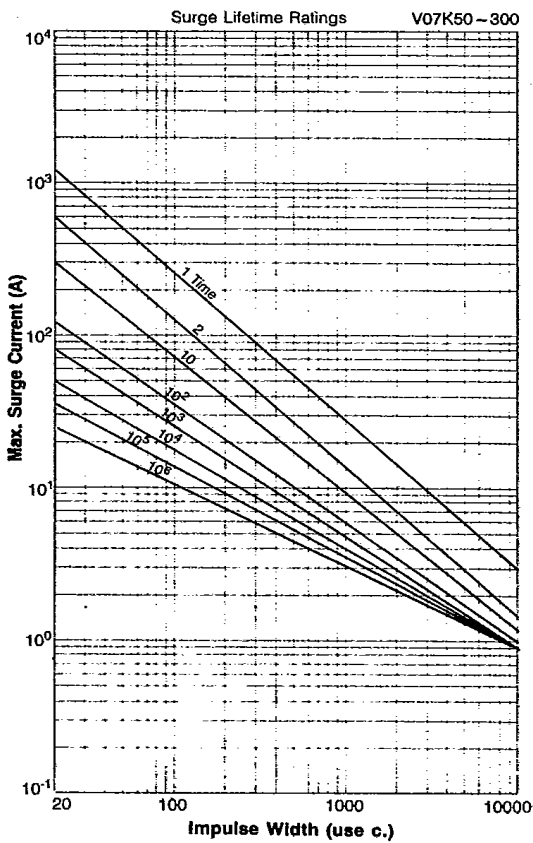
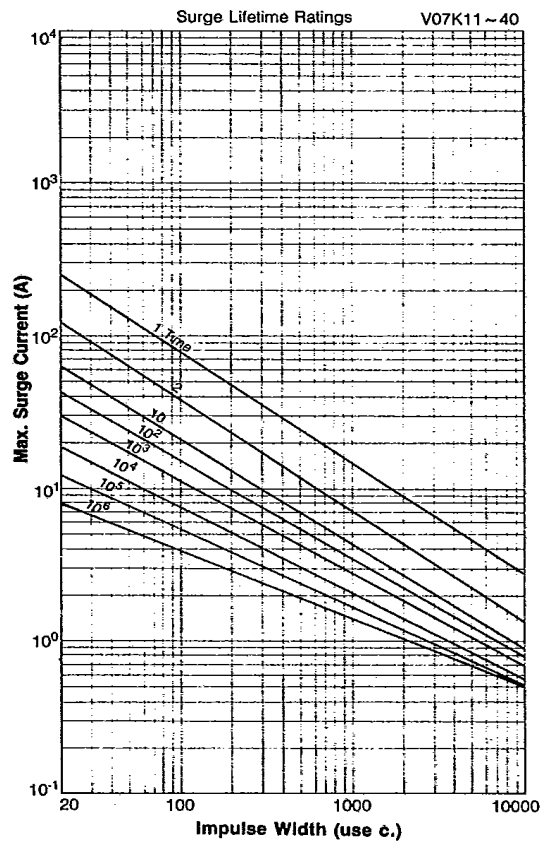
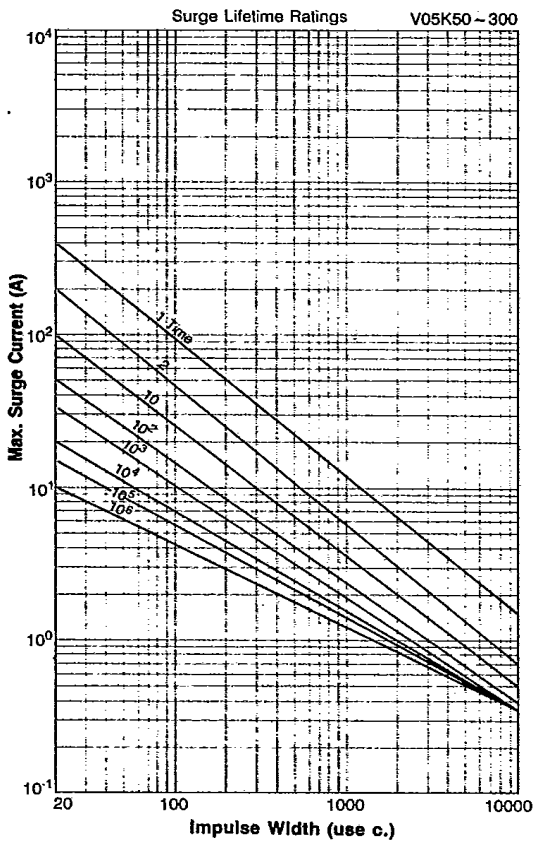


DERATING CURVES

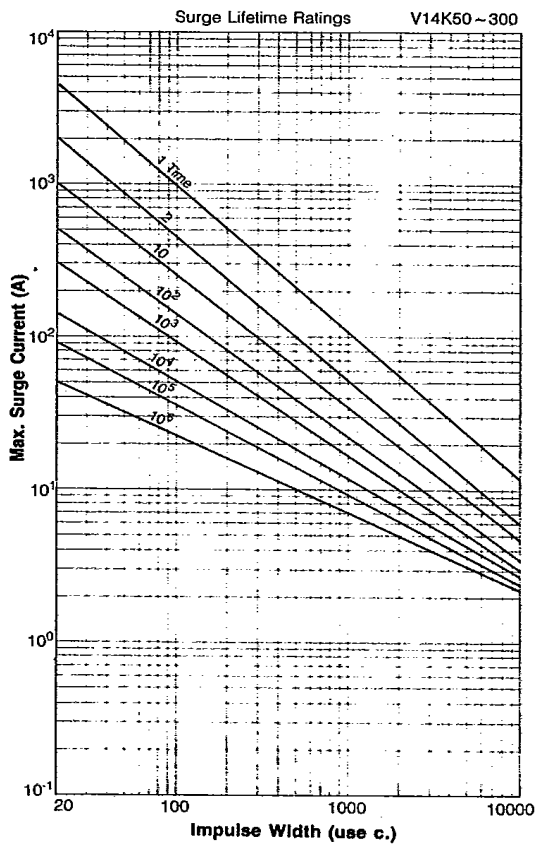
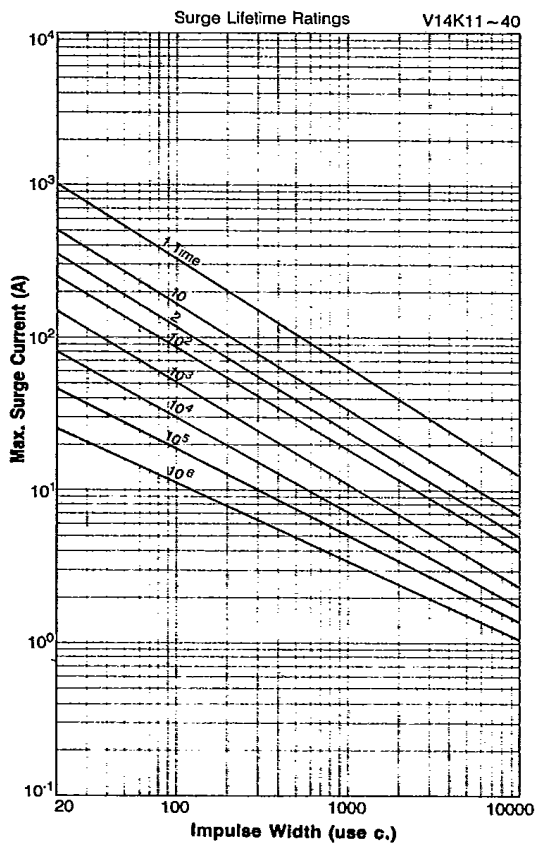
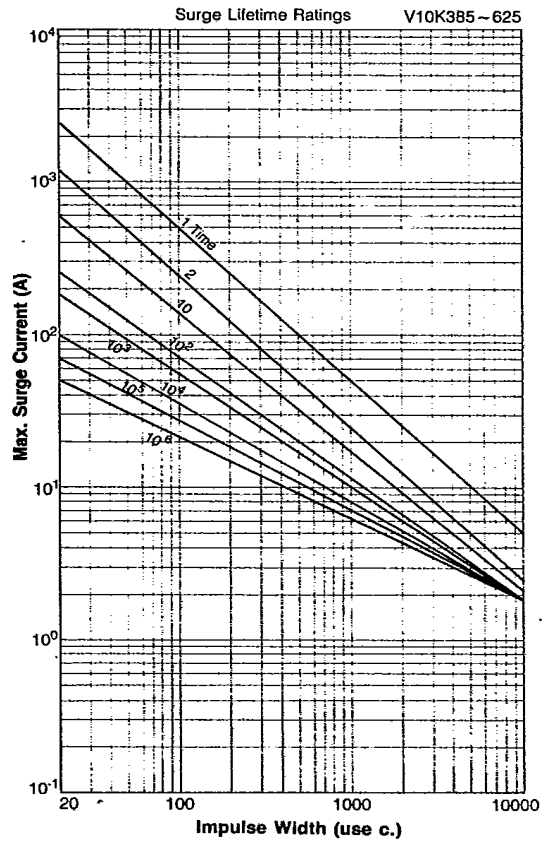
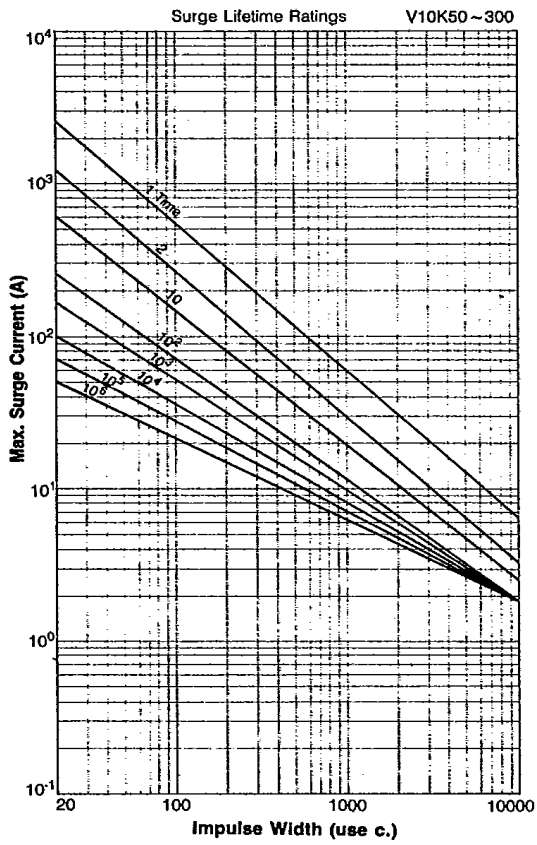
The derating curves are used to determine the maximum number of times a varistor can withstand a current impulse of a given peak amplitude and pulse width (specified waveshape) without a change in varistor voltage of greater than 10%.



Metal Oxide Varistors



Metal Oxide Varistors



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Metal Oxide Varistors

