

## Zinc Oxide Varistor



Standard Type

High Surge Type A

High Surge Type B

Device Marking	Varistor Voltage V (1mA)	Maximum Allowable Voltage(V)		Clamping Voltage (Max.) (V) (8/20μs)	Maximum Energy (J) (10/1000μs)	Maximum Peak Current (A) (8/20μs)
		AC.rms	DC			
WA 07N0018k	18(16-20)	11	14	36	0.9	250
WA 07N0022k	22(20-24)	14	18	43	1.1	250
WA 07N0027k	27(24-30)	17	22	53	1.4	250
WA 07N0033k	33(30-36)	20	26	65	1.7	250
WA 07N0039k	39(35-43)	25	31	77	2.1	250
WA 07N0047k	47(42-52)	30	38	93	2.5	250
WA 07N0056k	56(50-62)	35	45	110	3.1	250
WA 07N0068k	68(61-75)	40	56	136	3.6	250
WA 07N0082k	82(74-90)	50	65	136	5.5	1200
WA 07N0100k	100(90-110)	60	85	165	6.5	1200
WA 07N0120k	120(108-132)	75	100	200	7.8	1200
WA 07N0150k	150(135-165)	95	125	250	9.7	1200
WA 07N0180k	180(162-198)	115	150	300	11.7	1200
WA 07N0200k	200(185-225)	130	170	340	13	1200
WA 07N0220k	220(198-242)	140	180	360	14	1200
WA 07N0240k	240(216-264)	150	200	395	15	1200
WA 07N0270k	270(243-297)	175	225	455	18	1200
WA 07N0300k	300(270-330)	190	250	500	20	1200
WA 07N0330k	330(297-363)	210	275	550	23	1200
WA 07N0360k	360(324-396)	230	300	595	24	1200
WA 07N0390k	390(351-429)	250	320	650	26	1200
WA 07N0430k	430(387-473)	275	350	710	28	1200
WA 07N0470k	470(423-517)	300	385	775	29	1200
WA 07N0510k	510(459-561)	320	410	845	31	1200
WA 07N0560k	560(504-616)	350	455	930	35	1200
WA 07N0620k	620(558-682)	385	505	1025		
WA 07N0680k	680(612-748)	420	560	1120		
WA 07N0750k	750(675-825)	460	615	1240		
WA 07N0820k	820(738-902)	510	670	1355		
WA 07N0910k	910(819-1001)	550	745	1500		
WA 07N1000k	1000(900-1100)	625	825	1650		
WA 07N1100k	1100(990-1210)	680	895	1815		
WA 07N1800k	1800(1620-1980)	1000	1465	2970		

Standard Type	Device Marking	Varistor Voltage V (1mA)	Maximum Allowable Voltage(V)		Clamping Voltage (Max.) (V) (8/20μs)	Maximum Energy (J) (10/1000μs)	Maximum Peak Current (A) (8/20μs)
			AC.rms	DC			
High Surge Type A	WA 10N0018k	18(16-20)	11	14	36	2.1	500
	WA 10N0022k	22(20-24)	14	18	43	2.5	500
	WA 10N0027k	27(24-30)	17	22	53	3.0	500
	WA 10N0033k	33(30-36)	20	26	65	4.0	500
	WA 10N0039k	39(35-43)	25	31	77	4.6	500
	WA 10N0047k	47(42-52)	30	38	93	5.5	500
	WA 10N0056k	56(50-62)	35	45	110	7.0	500
	WA 10N0068k	68(61-75)	40	56	136	8.2	500
	WA 10N0082k	82(74-90)	50	65	136	12	2500
	WA 10N0100k	100(90-110)	60	85	165	15	2500
High Surge Type B	WA 10N0120k	120(108-132)	75	100	200	18	2500
	WA 10N0150k	150(135-165)	95	125	250	22	2500
	WA 10N0180k	180(162-198)	115	150	300	27	2500
	WA 10N0200k	200(185-225)	130	170	340	30	2500
	WA 10N0220k	220(198-242)	140	180	360	32	2500
	WA 10N0240k	240(216-264)	150	200	395	35	2500
	WA 10N0270k	270(243-297)	175	225	455	37	2500
	WA 10N0300k	300(270-330)	190	250	500	40	2500
	WA 10N0330k	330(297-363)	210	275	550	43	2500
	WA 10N0360k	360(324-396)	230	300	595	47	2500
	WA 10N0390k	390(351-429)	250	320	650	60	2500
	WA 10N0430k	430(387-473)	275	350	710	65	2500
	WA 10N0470k	470(423-517)	300	385	775	67	2500
	WA 10N0510k	510(459-561)	320	410	845	69	2500
	WA 10N0560k	560(504-616)	350	455	930	70	2500
	WA 10N0620k	620(558-682)	385	505	1025	72	2500
	WA 10N0680k	680(612-748)	420	560	1120	75	2500
	WA 10N0750k	750(675-825)	460	615	1240	77	2500
WA 10N0820k	820(738-902)	510	670	1355	80	2500	
WA 10N0910k	910(819-1001)	550	745	1500	85	2500	
WA 10N1000k	1000(900-1100)	625	825	1650	93	2500	
WA 10N1100k	1100(990-1210)	680	895	1815	102	2500	
WA 10N1800k	1800(1620-1980)	1000	1465	2970			

Standard Type	Device Marking	Varistor Voltage V (1mA)	Maximum Allowable Voltage(V)		Clamping Voltage (Max.) (V) (8/20μs)	Maximum Energy (J) (10/1000μs)	Maximum Peak Current (A) (8/20μs)
			AC.rms	DC			
High Surge Type A	WA 14N0018k	18(16-20)	11	14	36	4.0	1000
	WA 14N0022k	22(20-24)	14	18	43	5.0	1000
	WA 14N0027k	27(24-30)	17	22	53	6.0	1000
	WA 14N0033k	33(30-36)	20	26	65	7.5	1000
	WA 14N0039k	39(35-43)	25	31	77	8.6	1000
	WA 14N0047k	47(42-52)	30	38	93	10.	1000
	WA 14N0056k	56(50-62)	35	45	110	11.	1000
	WA 14N0068k	68(61-75)	40	56	136	14.	1000
	WA 14N0082k	82(74-90)	50	65	136	22	4500
	WA 14N0100k	100(90-110)	60	85	165	28	4500
High Surge Type B	WA 14N0120k	120(108-132)	75	100	200	32	4500
	WA 14N0150k	150(135-165)	95	125	250	40	4500
	WA 14N0180k	180(162-198)	115	150	300	50	4500
	WA 14N0200k	200(185-225)	130	170	340	57	4500
	WA 14N0220k	220(198-242)	140	180	360	60	4500
	WA 14N0240k	240(216-264)	150	200	395	63	4500
	WA 14N0270k	270(243-297)	175	225	455	70	4500
	WA 14N0300k	300(270-330)	190	250	500	77	4500
	WA 14N0330k	330(297-363)	210	275	550	85	4500
	WA 14N0360k	360(324-396)	230	300	595	93	4500
	WA 14N0390k	390(351-429)	250	320	650	100	4500
	WA 14N0430k	430(387-473)	275	350	710	115	4500
	WA 14N0470k	470(423-517)	300	385	775	118	4500
	WA 14N0510k	510(459-561)	320	410	845	121	4500
	WA 14N0560k	560(504-616)	350	455	930	125	4500
WA 14N0620k	620(558-682)	385	505	1025	128	4500	
WA 14N0680k	680(612-748)	420	560	1120	130	4500	
WA 14N0750k	750(675-825)	460	615	1240	143	4500	
WA 14N0820k	820(738-902)	510	670	1355	157	4500	
WA 14N0910k	910(819-1001)	550	745	1500	175	4500	
WA 14N1000k	1000(900-1100)	625	825	1650	190	4500	
WA 14N1100k	1100(990-1210)	680	895	1815	213	4500	
WA 14N1800k	1800(1620-1980)	1000	1465	2970	250	4500	

Standard Type	Device Marking	Varistor Voltage V (1mA)	Maximum Allowable Voltage(V)		Clamping Voltage (Max.) (V) (8/20μs)	Maximum Energy (J) (10/1000μs)	Maximum Peak Current (A) (8/20μs)
			AC.rms	DC			
High Surge Type A	WA 20N0018k	18(16-20)	11	14	36	11	2000
	WA 20N0022k	22(20-24)	14	18	43	14	2000
	WA 20N0027k	27(24-30)	17	22	53	16	2000
	WA 20N0033k	33(30-36)	20	26	65	23	2000
	WA 20N0039k	39(35-43)	25	31	77	26	2000
	WA 20N0047k	47(42-52)	30	38	93	30	2000
	WA 20N0056k	56(50-62)	35	45	110	38	2000
	WA 20N0068k	68(61-75)	40	56	136	41	2000
	WA 20N0082k	82(74-90)	50	65	136	45	6500
	WA 20N0100k	100(90-110)	60	85	165	50	6500
High Surge Type B	WA 20N0120k	120(108-132)	75	100	200	55	6500
	WA 20N0150k	150(135-165)	95	125	250	70	6500
	WA 20N0180k	180(162-198)	115	150	300	85	6500
	WA 20N0200k	200(185-225)	130	170	340	95	6500
	WA 20N0220k	220(198-242)	140	180	360	100	6500
	WA 20N0240k	240(216-264)	150	200	395	108	6500
	WA 20N0270k	270(243-297)	175	225	455	127	6500
	WA 20N0300k	300(270-330)	190	250	500	136	6500
	WA 20N0330k	330(297-363)	210	275	550	150	6500
	WA 20N0360k	360(324-396)	230	300	595	163	6500
	WA 20N0390k	390(351-429)	250	320	650	180	6500
	WA 20N0430k	430(387-473)	275	350	710	190	6500
	WA 20N0470k	470(423-517)	300	385	775	204	6500
	WA 20N0510k	510(459-561)	320	410	845	210	6500
WA 20N0560k	560(504-616)	350	455	930	215	6500	
WA 20N0620k	620(558-682)	385	505	1025	224	6500	
WA 20N0680k	680(612-748)	420	560	1120	230	6500	
WA 20N0750k	750(675-825)	460	615	1240	255	6500	
WA 20N0820k	820(738-902)	510	670	1355	282	6500	
WA 20N0910k	910(819-1001)	550	745	1500	310	6500	
WA 20N1000k	1000(900-1100)	625	825	1650	342	6500	
WA 20N1100k	1100(990-1210)	680	895	1815	382	6500	
WA 20N1800k	1800(1620-1980)	1000	1465	2970	625	6500	

Unit:mm

Symbol	Ø7	Ø 10	Ø 14	Ø 20
Dmax	9.3	13.0	17.2	22.0
Hmax	12.0	15.0	19.0	26.0
A	5.0	7.5	7.5	10.0
d	0.6	0.8	0.8	1.0

