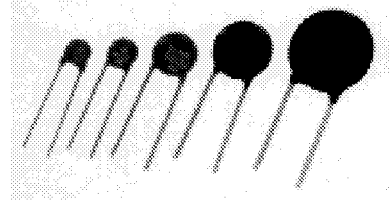


"ZNR[®]" Transient/Surge Absorbers (Low Voltage Rating)

Series: **V**

Type: **D**



"ZNR[®]" Transient/Surge Absorber, Series V is newly released through our continued research in ceramic material composition of ZnO varistor and manufacturing process, featuring large surge current handling capability and energy handling capability for absorbing transient overvoltage in compact size.

■ Features (Series V)

- Improved in "Surge Current Handling Capability (@ 8/20 μ s, 2 times)" by 1.5 to 2.5 times over the current "ZNRs, Series C"
- Very large "Energy Handling Capability" absorbing transient overvoltages in compact sizes
- Varistor Voltage Range: 18 to 68 V (± 10 %)
- Lower Clamping Voltage for better surge protection
- Fast response to high speed transient/surge voltage
- Bilateral and symmetrical V-I characteristics similar to back to back zener diode

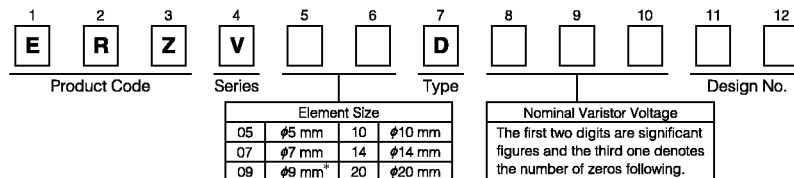
■ Recommended Applications

- Transistor, diode, IC, thyristor or triac semiconductor protection
- Surge protection in consumer electronics
- Surge protection in communication, measuring or controller electronics
- Surge protection in electronic home appliances, gas or petroleum appliances
- Relay or electromagnetic valve surge absorption

■ Precautions for Handling

See Page 36 to 38

■ Explanation of Part Numbers (Bulk)



* See page 8 for specifications of $\phi 9$ mm (9 Series).

■ Reference Guide to Standard Products (Series V, Type D)

Part No.	Maximum Allowable Voltage		Varisto Voltage*	Clamping Voltage @ Test Current (8/20 μs)		Maximum Energy (J)		Maximum Peak Current (8/20 μs)	
	ACrms(V)	DC (V)		V _{KA} (V)	I _p (A)	10/1000 μs	2 ms	1 time (A)	2 times (A)
ERZV05D180	11	14	18 (16–20)	40	1	0.6	0.4	250	125
ERZV07D180				36	2.5	1.1	0.9	500	250
ERZV10D180				36	5	2.6	2.2	1000	500
ERZV14D180				36	10	5.2	4.3	2000	1000
ERZV20D180				36	20	13	12	3000	2000
ERZV05D220	14	18	22 (20–24)	48	1	0.7	0.5	250	125
ERZV07D220				43	2.5	1.3	1.1	500	250
ERZV10D220				43	5	3.2	2.6	1000	500
ERZV14D220				43	10	6.3	5.3	2000	1000
ERZV20D220				43	20	16	14	3000	2000
ERZV05D270	17	22	27 (24–30)	60	1	0.9	0.7	250	125
ERZV07D270				53	2.5	1.6	1.3	500	250
ERZV10D270				53	5	3.9	3.2	1000	500
ERZV14D270				53	10	7.8	6.5	2000	1000
ERZV20D270				53	20	19	17	3000	2000
ERZV05D330	20	26	33 (30–36)	73	1	1.1	0.8	250	125
ERZV07D330				65	2.5	2.0	1.6	500	250
ERZV10D330				65	5	4.8	4.0	1000	500
ERZV14D330				65	10	9.5	7.9	2000	1000
ERZV20D330				65	20	24	21	3000	2000
ERZV05D390	25	31	39 (35–43)	86	1	1.2	0.9	250	125
ERZV07D390				77	2.5	2.4	1.9	500	250
ERZV10D390				77	5	5.6	4.7	1000	500
ERZV14D390				77	10	11	9.4	2000	1000
ERZV20D390				77	20	28	25	3000	2000
ERZV05D470	30	38	47 (42–52)	104	1	1.5	1.1	250	125
ERZV07D470				93	2.5	2.8	2.3	500	250
ERZV10D470				93	5	6.8	5.6	1000	500
ERZV14D470				93	10	14	11	2000	1000
ERZV20D470				93	20	34	30	3000	2000
ERZV05D560	35	45	56 (50–62)	123	1	1.8	1.3	250	125
ERZV07D560				110	2.5	3.4	2.7	500	250
ERZV10D560				110	5	8.1	6.7	1000	500
ERZV14D560				110	10	16	13	2000	1000
ERZV20D560				110	20	41	36	3000	2000
ERZV05D680	40	56	68 (61–75)	150	1	2.2	1.6	250	125
ERZV07D680				135	2.5	4.1	3.3	500	250
ERZV10D680				135	5	9.8	8.2	1000	500
ERZV14D680				135	10	20	16	2000	1000
ERZV20D680				135	20	49	44	3000	2000

● Operating Temperature Range: –40 to 85 °C

● Storage Temperature Range: –40 to 125 °C

* Varistor Voltage: 5 Series...V_{0.1mA}

7, 10, 14 and 20 Series...V_{1mA}

● Rated Power

Part No.	Rated Power (W)	Part No.	Rated Power (W)
ERZV05D180 – 680	0.01	ERZV14D180 – 680	0.1
ERZV07D180 – 680	0.02	ERZV20D180 – 680	0.2
ERZV10D180 – 680	0.05		

5 Series

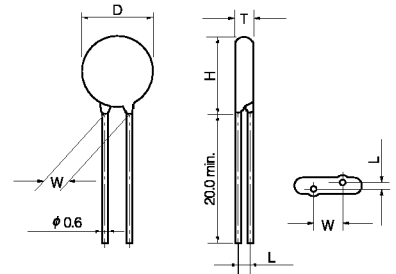
■ Ratings and Characteristics

- Operating Temperature Range: -40 to 85 °C
- Storage Temperature Range: -40 to 125 °C
- Temperature Coefficient of Varistor Voltage: 0 to -0.05 %/°C

Part No.	Varistor Voltage	Maximum Allowable Voltage		Clamping Voltage (max.)	Rated Power	Maximum Energy		Maximum Peak Current (8/20 μs)		Capacitance (max.)
		V _{0.1 mA} (V)	ACrms (V)	DC (V)		(10/1000 μs) (J)	(2 ms) (J)	1 time (A)	2 times (A)	
ERZV05D180	18 (16-20)	11	14	40	0.01	0.6	0.4	250	125	1600
ERZV05D220	22 (20-24)	14	18	48	0.01	0.7	0.5	250	125	1500
ERZV05D270	27 (24-30)	17	22	60	0.01	0.9	0.7	250	125	1450
ERZV05D330	33 (30-36)	20	26	73	0.01	1.1	0.8	250	125	1400
ERZV05D390	39 (35-43)	25	31	86	0.01	1.2	0.9	250	125	700
ERZV05D470	47 (42-52)	30	38	104	0.01	1.5	1.1	250	125	650
ERZV05D560	56 (50-62)	35	45	123	0.01	1.8	1.3	250	125	600
ERZV05D680	68 (61-75)	40	56	150	0.01	2.2	1.6	250	125	580

■ Dimensions in mm (not to scale)

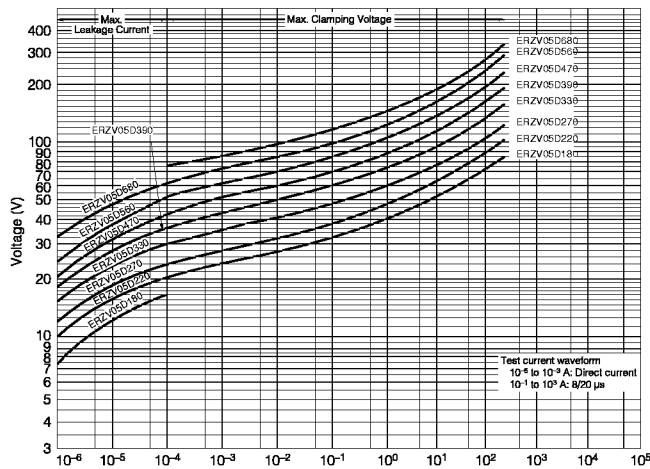
Part No.	D max.	T max.	W	H max.	L
ERZV05D180	7.0	4.5	5.0±1.0	10.0	1.5±1.0
ERZV05D220					
ERZV05D270					
ERZV05D330					
ERZV05D390					
ERZV05D470					
ERZV05D560					
ERZV05D680					



■ Typical Characteristics

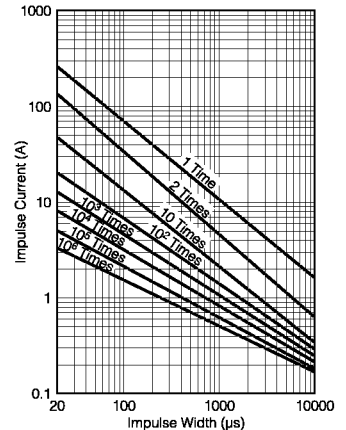
Voltage vs. Current

(ERZV05D180 to ERZV05D680)



Impulse Derating

(ERZV05D180 to ERZV05D680)



7 Series

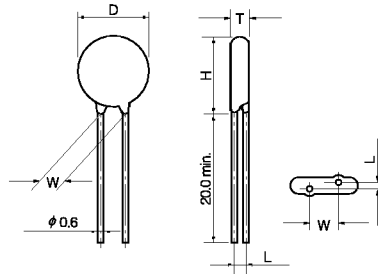
■ Ratings and Characteristics

- Operating Temperature Range: -40 to 85 °C
- Storage Temperature Range: -40 to 125 °C
- Temperature Coefficient of Varistor Voltage: 0 to -0.05 %/°C

Part No.	Varistor Voltage	Maximum Allowable Voltage		Clamping Voltage (max.)	Rated Power	Maximum Energy		Maximum Peak Current (8/20 μs)		Capacitance (max.)
						(10/100 μs)	(2 ms)	1 time	2 times	
	V_{1mA} (V)	ACrms (V)	DC (V)	$V_{2.5A}$ (V)	(W)	(J)	(J)	(A)	(A)	@1 kHz (pF)
ERZV07D180	18 (16-20)	11	14	36	0.02	1.1	0.9	500	250	3800
ERZV07D220	22 (20-24)	14	18	43	0.02	1.3	1.1	500	250	3600
ERZV07D270	27 (24-30)	17	22	53	0.02	1.6	1.3	500	250	3400
ERZV07D330	33 (30-36)	20	26	65	0.02	2.0	1.6	500	250	2900
ERZV07D390	39 (35-43)	25	31	77	0.02	2.4	1.9	500	250	1600
ERZV07D470	47 (42-52)	30	38	93	0.02	2.8	2.3	500	250	1550
ERZV07D560	56 (50-62)	35	45	110	0.02	3.4	2.7	500	250	1500
ERZV07D680	68 (61-75)	40	56	135	0.02	4.1	3.3	500	250	1200

■ Dimensions in mm (not to scale)

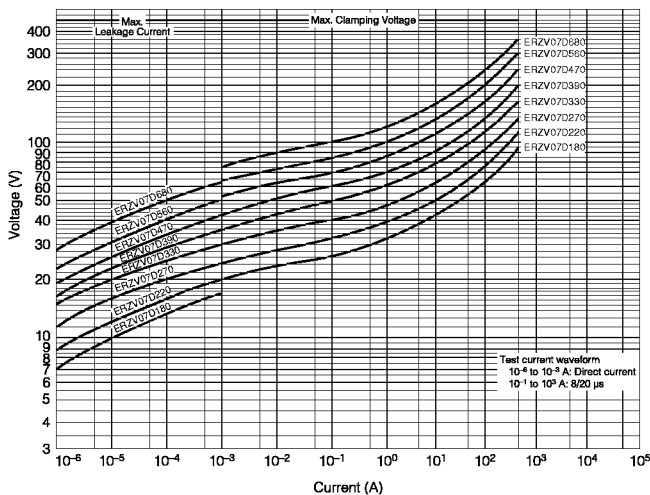
Part No.	D max.	T max.	W	H max.	L
ERZV07D180	8.5	4.5	5.0±1.0	11.5	1.3±1.0
ERZV07D220		4.6			1.4±1.0
ERZV07D270		4.7			1.5±1.0
ERZV07D330		4.9			1.7±1.0
ERZV07D390		4.8			1.6±1.0
ERZV07D470		4.9			1.7±1.0
ERZV07D560		5.0			1.8±1.0
ERZV07D680		5.2			2.0±1.0



■ Typical Characteristics

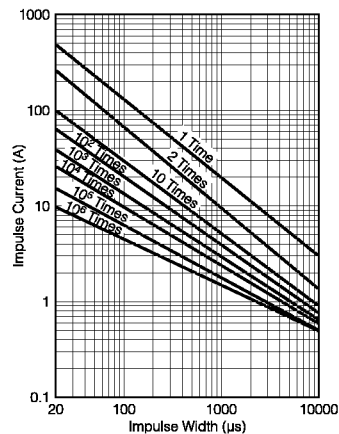
Voltage vs. Current

(ERZV07D180 to ERZV07D680)



Impulse Derating

(ERZV07D180 to ERZV07D680)



9 Series **

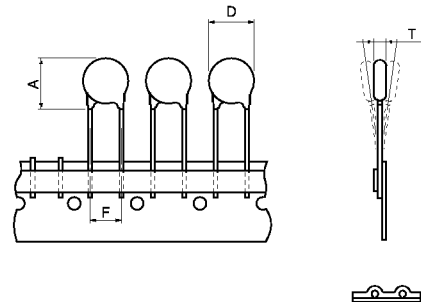
■ Ratings and Characteristics

- Operating Temperature Range: -40 to 85 °C
- Storage Temperature Range: -40 to 125 °C
- Temperature Coefficient of Varistor Voltage: 0 to -0.05 %/°C

Part No.	Varistor Voltage	Maximum Allowable Voltage		Clamping Voltage (max.)	Rated Power	Maximum Energy		Maximum Peak Current (8/20 μs)		Capacitance (max.)
		V _{1mA} (V)	ACrms (V)	DC (V)		(10/1000 μs) (J)	(2 ms) (J)	1 time (A)	2 times (A)	
ERZVA9D180	18 (16-20)	11	14	36	0.02	2.2	1.9	800	400	16000
ERZVA9D220	22 (20-24)	14	18	43	0.02	2.7	2.2	800	400	11000
ERZVA9D270	27 (24-30)	17	22	53	0.02	3.3	2.7	800	400	8000
ERZVA9D330	33 (30-36)	20	26	65	0.02	4.1	3.4	800	400	6300
ERZVA9D390	39 (35-43)	25	31	77	0.02	4.8	4.0	800	400	5200
ERZVA9D470	47 (42-52)	30	38	93	0.02	5.8	4.8	800	400	4600
ERZVA9D560	56 (50-62)	35	45	110	0.02	7.0	5.7	800	400	3750
ERZVA9D680	68 (61-75)	40	56	135	0.02	8.3	7.0	800	400	2800

■ Dimensions in mm (not to scale)

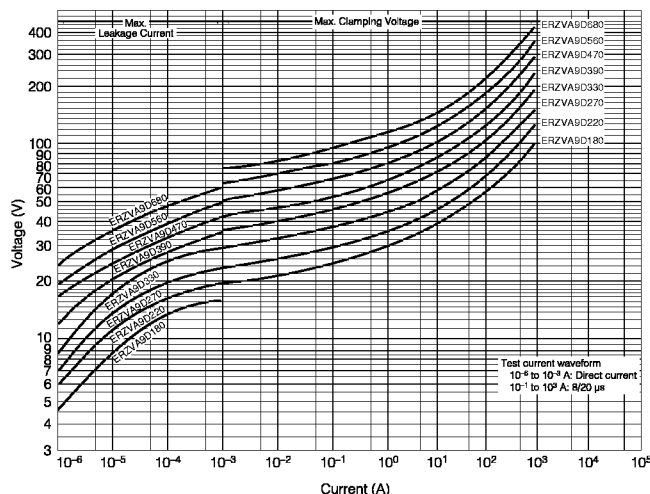
Part No.	D max.	T max.	F	A max.
ERZVA9D180	11.5	3.8	5.0±0.5	14.0
ERZVA9D220		4.0		
ERZVA9D270		4.2		
ERZVA9D330		4.5		
ERZVA9D390		4.0		
ERZVA9D470		4.2		
ERZVA9D560		4.4		
ERZVA9D680		4.5		



■ Typical Characteristics

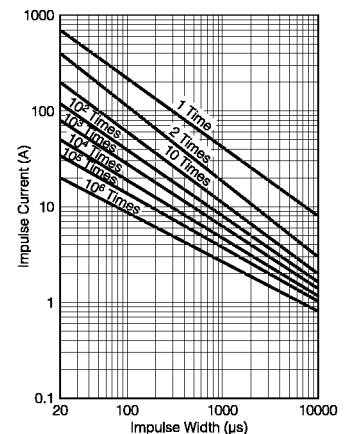
Voltage vs. Current

(ERZVA9D180 to ERZVA9D680)



Impulse Derating

(ERZVA9D180 to ERZVA9D680)



10 Series

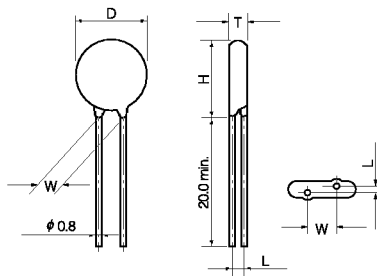
■ Ratings and Characteristics

- Operating Temperature Range: -40 to 85 °C
- Storage Temperature Range: -40 to 125 °C
- Temperature Coefficient of Varistor Voltage: 0 to -0.05 %/°C

Part No.	Varistor Voltage	Maximum Allowable Voltage		Clamping Voltage (max.)	Rated Power	Maximum Energy		Maximum Peak Current (8/20 μs)		Capacitance (max.)
		V _{1mA} (V)	ACrms (V)			(10/1000 μs)	(2 ms)	1 time	2 times	
ERZV10D180	18 (16-20)	11	14	36	0.05	2.6	2.2	1000	500	16000
ERZV10D220	22 (20-24)	14	18	43	0.05	3.2	2.6	1000	500	11000
ERZV10D270	27 (24-30)	17	22	53	0.05	3.9	3.2	1000	500	8000
ERZV10D330	33 (30-36)	20	26	65	0.05	4.8	4.0	1000	500	6300
ERZV10D390	39 (35-43)	25	31	77	0.05	5.6	4.7	1000	500	5200
ERZV10D470	47 (42-52)	30	38	93	0.05	6.8	5.6	1000	500	4600
ERZV10D560	56 (50-62)	35	45	110	0.05	8.1	6.7	1000	500	3750
ERZV10D680	68 (61-75)	40	56	135	0.05	9.8	8.2	1000	500	2800

■ Dimensions in mm (not to scale)

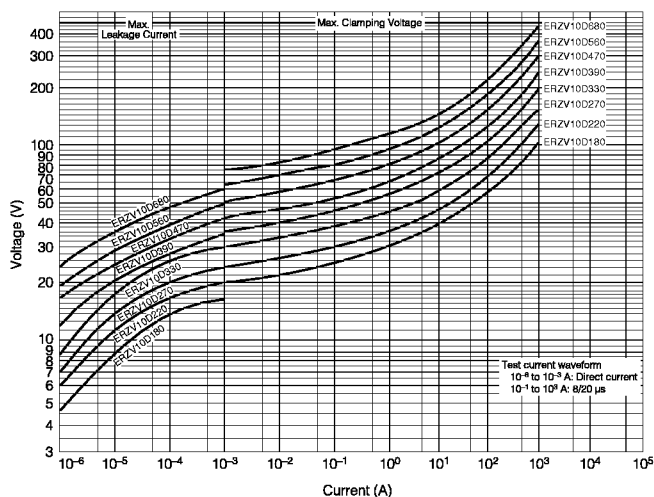
Part No.	D max.	T max.	W	H max.	L
ERZV10D180	11.5	4.6	7.5±1.0	14.5	1.3±1.0
ERZV10D220		4.7			1.4±1.0
ERZV10D270		4.8			1.5±1.0
ERZV10D330		5.0			1.7±1.0
ERZV10D390		4.9			1.6±1.0
ERZV10D470		5.0			1.7±1.0
ERZV10D560		5.1			1.8±1.0
ERZV10D680		5.3			2.0±1.0



■ Typical Characteristics

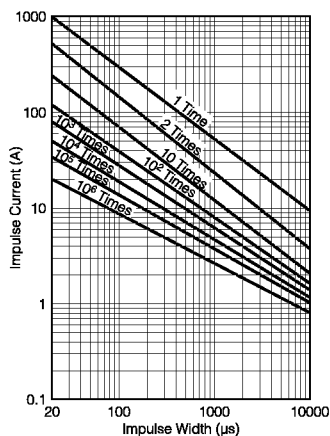
Voltage vs. Current

(ERZV10D180 to ERZV10D680)



Impulse Derating

(ERZV10D180 to ERZV10D680)



14 Series

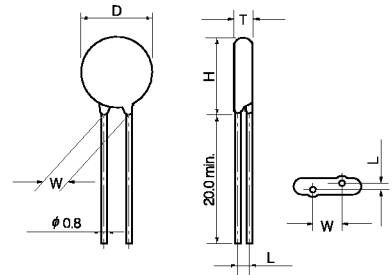
■ Ratings and Characteristics

- Operating Temperature Range: -40 to 85 °C
- Storage Temperature Range: -40 to 125 °C
- Temperature Coefficient of Varistor Voltage: 0 to -0.05 %/°C

Part No.	Varistor Voltage	Maximum Allowable Voltage		Clamping Voltage (max.)	Rated Power	Maximum Energy		Maximum Peak Current (8/20 μs)		Capacitance (max.)
		ACrms (V)	DC (V)			(10/1000 μs)	(2 ms)	1 time	2 times	
	V _{1mA} (V)			V _{10A} (V)	(W)	(J)	(J)	(A)	(A)	@1 kHz (pF)
ERZV14D180	18 (16-20)	11	14	36	0.1	5.2	4.3	2000	1000	25000
ERZV14D220	22 (20-24)	14	18	43	0.1	6.3	5.3	2000	1000	20000
ERZV14D270	27 (24-30)	17	22	53	0.1	7.8	6.5	2000	1000	16000
ERZV14D330	33 (30-36)	20	26	65	0.1	9.5	7.9	2000	1000	12200
ERZV14D390	39 (35-43)	25	31	77	0.1	11	9.4	2000	1000	7000
ERZV14D470	47 (42-52)	30	38	93	0.1	14	11	2000	1000	6750
ERZV14D560	56 (50-62)	35	45	110	0.1	16	13	2000	1000	6500
ERZV14D680	68 (61-75)	40	56	135	0.1	20	16	2000	1000	5500

■ Dimensions in mm (not to scale)

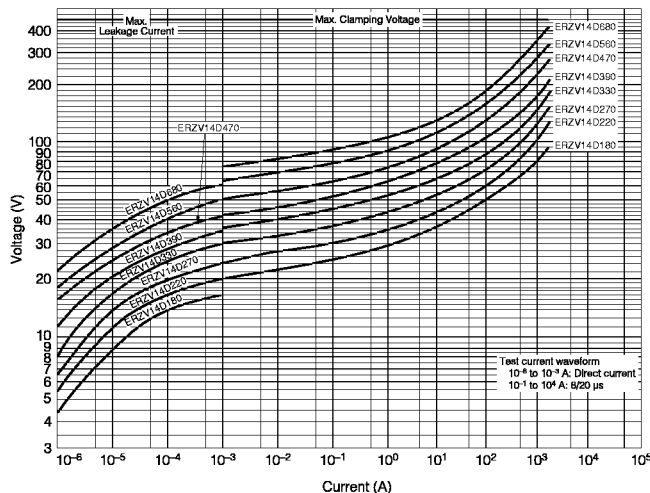
Part No.	D max.	T max.	W	H max.	L
ERZV14D180	15.5	4.6	7.5±1.0	18.5	1.3±1.0
ERZV14D220		4.7			1.4±1.0
ERZV14D270		4.8			1.5±1.0
ERZV14D330		5.0			1.7±1.0
ERZV14D390		4.9			1.6±1.0
ERZV14D470		5.0			1.7±1.0
ERZV14D560		5.1			1.8±1.0
ERZV14D680		5.3			2.0±1.0



■ Typical Characteristics

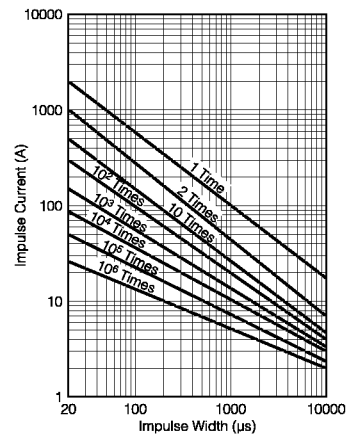
Voltage vs. Current

(ERZV14D180 to ERZV14D680)



Impulse Derating

(ERZV14D180 to ERZV14D680)



20 Series

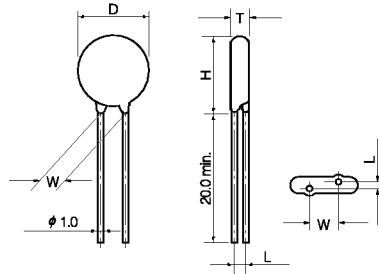
■ Ratings and Characteristics

- Operating Temperature Range: -40 to 85 °C
- Storage Temperature Range: -40 to 125 °C
- Temperature Coefficient of Varistor Voltage: 0 to -0.05 %/°C

Part No.	Varistor Voltage	Maximum Allowable Voltage		Clamping Voltage (max.)	Rated Power	Maximum Energy		Maximum Peak Current (8/20 μs)		Capacitance (max.)
		ACrms (V)	DC (V)			(10/1000 μs)	(2 ms)	1 time	2 times	
	V_{1mA} (V)			V_{20A} (V)	(W)	(J)	(J)	(A)	(A)	@1 kHz (pF)
ERZV20D180	18 (16-20)	11	14	36	0.2	13	12	3000	2000	40000
ERZV20D220	22 (20-24)	14	18	43	0.2	16	14	3000	2000	30000
ERZV20D270	27 (24-30)	17	22	53	0.2	19	17	3000	2000	24500
ERZV20D330	33 (30-36)	20	26	65	0.2	24	21	3000	2000	20000
ERZV20D390	39 (35-43)	25	31	77	0.2	28	25	3000	2000	13800
ERZV20D470	47 (42-52)	30	38	93	0.2	34	30	3000	2000	13500
ERZV20D560	56 (50-62)	35	45	110	0.2	41	36	3000	2000	12200
ERZV20D680	68 (61-75)	40	56	135	0.2	49	44	3000	2000	11500

■ Dimensions in mm (not to scale)

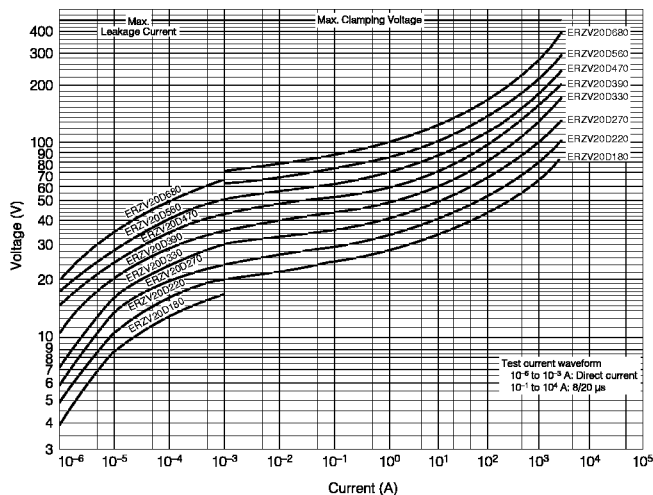
Part No.	D max.	T max.	W	H max.	L
ERZV20D180	21.5	5.1	10.0±1.0	24.5	1.5±1.0
ERZV20D220		5.2			1.6±1.0
ERZV20D270		5.3			1.7±1.0
ERZV20D330		5.5			1.9±1.0
ERZV20D390		5.5			1.9±1.0
ERZV20D470		5.6			2.0±1.0
ERZV20D560		5.7			2.1±1.0
ERZV20D680		5.8			2.2±1.0



■ Typical Characteristics

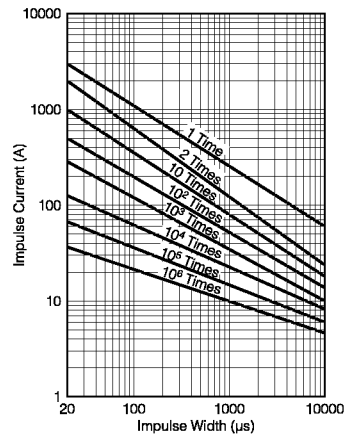
Voltage vs. Current

(ERZV20D180 to ERZV20D680)



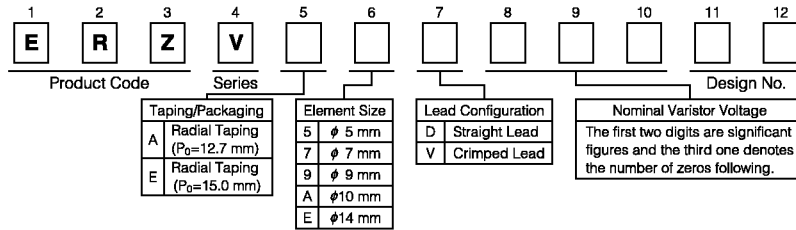
Impulse Derating

(ERZV20D180 to ERZV20D680)



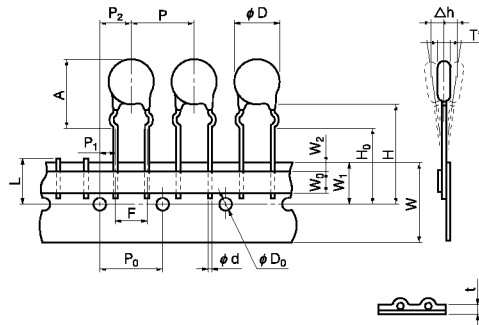
Taping Specifications for Automated Assembly

■ Explanation of Part Numbers (Taping)



Crimped Leads and Taped

■ Taping Dimensions in mm (not to scale)



* Dimension "T": Conforms to each individual specification.

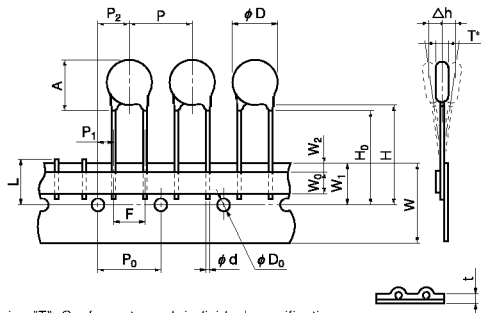
Symbol	Type	Type I	Type II
P		12.7±1.0	15.0±1.0 or 30.0±1.0
P ₀		12.7±0.3	15.0±0.3
P ₁		3.85±0.70	3.75±0.70
P ₂		6.35±1.30	7.5±1.3
ϕ d		0.60 ^{+0.06} _{-0.05}	0.80 ^{+0.08} _{-0.06}
F		5.0±0.5	7.5±0.5
Δ h		0±2	0±2
W		18.0 ^{+1.0} _{-0.5}	18.0 ^{+1.0} _{-0.5}
W ₀		5.0 min.	5.0 min.
W ₁		9.0±0.5	9.0±0.5
W ₂		3 max.	3 max.
H		Approx. 22	Approx. 22
H ₀		17.0±0.5	16.0±0.5
ϕ D ₀		ϕ 4.0±0.2	ϕ 4.0±0.2
t		0.6±0.3	0.6±0.3
L		11 max.	11 max.

■ Standard Products

Crimped Leads & Taped						
Varistor Voltage (V) (Nominal)	Type	Taping Type I (P ₀ =12.7±0.3 mm)			Taping Type II (P ₀ =15.0±0.3 mm)	
	Series	5 Series	7 Series	9 Series	10 Series	14 Series
		Part No.	Part No.	Part No.	Part No.	Part No.
18		ERZVA5V180	ERZVA7V180	ERZVA9V180	ERZVEAV180	ERZVEEV180
22		ERZVA5V220	ERZVA7V220	ERZVA9V220	ERZVEAV220	ERZVEEV220
27		ERZVA5V270	ERZVA7V270	ERZVA9V270	ERZVEAV270	ERZVEEV270
33		ERZVA5V330	ERZVA7V330	ERZVA9V330	ERZVEAV330	ERZVEEV330
39		ERZVA5V390	ERZVA7V390	ERZVA9V390	ERZVEAV390	ERZVEEV390
47		ERZVA5V470	ERZVA7V470	ERZVA9V470	ERZVEAV470	ERZVEEV470
56		ERZVA5V560	ERZVA7V560	ERZVA9V560	ERZVEAV560	ERZVEEV560
68		ERZVA5V680	ERZVA7V680	ERZVA9V680	ERZVEAV680	ERZVEEV680
Dimensions in mm	ϕ D	7.0 max.	8.5 max.	11.5 max.	11.5 max.	15.5 max.
	F	5.0±0.5	5.0±0.5	5.0±0.5	7.5±0.5	7.5±0.5
	ϕ d	0.60 ^{+0.06} _{-0.05}	0.60 ^{+0.06} _{-0.05}	0.60 ^{+0.06} _{-0.05}	0.80 ^{+0.08} _{-0.06}	0.80 ^{+0.08} _{-0.06}
	A	13.0 max.	14.5 max.	17.5 max.	17.5 max.	21.0 max.

Straight Leads and Taped

■ Taping Dimensions in mm (not to scale)



* Dimension "T*": Conforms to each individual specification.

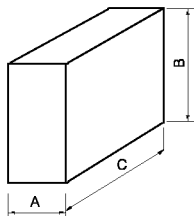
P	12.7±1.0
P ₀	12.7±0.3
P ₁	3.85±0.70
P ₂	6.35±1.30
φd	0.60 ^{+0.06} _{-0.05}
F	5.0±0.5
Δh	0±2
W	18.0 ^{+1.0} _{-0.8}
W ₀	5.0 min.
W ₁	9.0±0.5
W ₂	3 max.
H	Approx. 20
H ₀	17.0±0.5
φD ₀	φ4.0±0.2
t	0.6±0.3
L	11 max.

■ Standard Products

Straight Leads & Taped				
Varistor Voltage (V) (Nominal)	Series	5 Series	7 Series	9 Series
		Part No.	Part No.	Part No.
18		ERZVA5D180	ERZVA7D180	ERZVA9D180
22		ERZVA5D220	ERZVA7D220	ERZVA9D220
27		ERZVA5D270	ERZVA7D270	ERZVA9D270
33		ERZVA5D330	ERZVA7D330	ERZVA9D330
39		ERZVA5D390	ERZVA7D390	ERZVA9D390
47		ERZVA5D470	ERZVA7D470	ERZVA9D470
56		ERZVA5D560	ERZVA7D560	ERZVA9D560
68		ERZVA5D680	ERZVA7D680	ERZVA9D680
Dimensions in mm	φD	7.0 max.	8.5 max.	11.5 max.
	F	5.0±0.5	5.0±0.5	5.0±0.5
	φd	0.60 ^{+0.06} _{-0.05}	0.60 ^{+0.06} _{-0.05}	0.60 ^{+0.06} _{-0.05}
	A	10.0 max.	11.5 max.	14.0 max.

■ Packaging Specifications

Part No.	Dimensions in mm (Packing Case)		Packing Quantity
ERZVA5V□□□ ERZVA7V□□□ ERZVA9V□□□ (Crimped Leads and Taped)	A	55 max.	1000 pcs./Box
	B	330 max.	
	C	340 max.	
ERZVA5D□□□ ERZVA7D□□□ ERZVA9D□□□ (Straight Leads and Taped)			1000 pcs./Box
ERZVEAV□□□ ERZVEEV□□□ (Crimped Leads and Taped)	A	65 max.	1000 pcs./Box
	B	360 max.	500 pcs./Box
	C	340 max.	

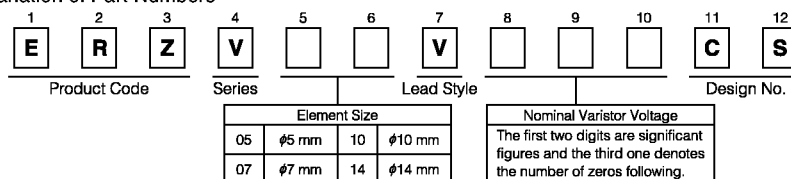


Note

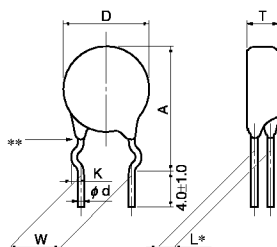
- Missing components on tape in succession shall be 3 pcs max. and total packing quantity shall be same as indications on the box.

“ZNR[®]” Transient/Surge Absorbers, Crimped Lead Type

■ Explanation of Part Numbers



■ Dimensions in mm (not to scale) Crimped Lead Type



Series	5 Series	7 Series	10 Series	14 Series
Symbol				
A	13.0 max.	14.5 max.	17.5 max.	21.0 max.
D	7.0 max.	8.5 max.	11.5 max.	15.5 max.
K	(1.2±0.4)	(1.2±0.4)	(1.4±0.4)	(1.4±0.4)
W	5.0±1.0	5.0±1.0	7.5±1.0	7.5±1.0
φd	0.6 ^{+0.06} / _{-0.05}	0.6 ^{+0.06} / _{-0.05}	0.8 ^{+0.08} / _{-0.05}	0.8 ^{+0.08} / _{-0.05}
T max.	4.5	4.5 – 5.2	4.6 – 5.3	4.6 – 5.3

Notes * Dimension “L”: Conforms to each individual specification
 ** Resin extensions: No resin below center of the hook

■ Standard Products

Varistor Voltage (V) (Nominal)	Series			
	5 Series	7 Series	10 Series	14 Series
	Part No.	Part No.	Part No.	Part No.
18	ERZV05V180CS	ERZV07V180CS	ERZV10V180CS	ERZV14V180CS
22	ERZV05V220CS	ERZV07V220CS	ERZV10V220CS	ERZV14V220CS
27	ERZV05V270CS	ERZV07V270CS	ERZV10V270CS	ERZV14V270CS
33	ERZV05V330CS	ERZV07V330CS	ERZV10V330CS	ERZV14V330CS
39	ERZV05V390CS	ERZV07V390CS	ERZV10V390CS	ERZV14V390CS
47	ERZV05V470CS	ERZV07V470CS	ERZV10V470CS	ERZV14V470CS
56	ERZV05V560CS	ERZV07V560CS	ERZV10V560CS	ERZV14V560CS
68	ERZV05V680CS	ERZV07V680CS	ERZV10V680CS	ERZV14V680CS