

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

ERZV07D180 to ERZV07D680

Part No.	Varistor Voltage	Maximum Allowable Voltage		Clamping Voltage (max.)	Rated Power	Maximum Energy		Maximum Peak Current (8/20 μs)		Capacitance (max.)
						(10/1000 μs)	(2 ms)	1 time	2 times	
		V _{1mA} (V)	ACrms (V)	DC (V)	V _{2.5A} (V)	(W)	(J)	(J)	(A)	(A)
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

ERZV07D820 to ERZV07D511

Part No.	Varistor Voltage	Maximum Allowable Voltage		Clamping Voltage (max.)	Rated Power	Maximum Energy		Maximum Peak Current (8/20 μs)		Capacitance (max.)
						(10/1000 μs)	(2 ms)	1 time	2 times	
		V _{1mA} (V)	ACrms (V)	DC (V)	V _{10A} (V)	(W)	(J)	(J)	(A)	(A)
ERZV07D820	82(74– 90)	50	65	135	0.25	7	5	1750	1250	810
ERZV07D101	100(90–110)	60	85	165	0.25	8.5	6	1750	1250	700
ERZV07D121	120(108–132)	75	100	200	0.25	10	7	1750	1250	590
ERZV07D151	150(135–165)	95	125	250	0.25	13	9	1750	1250	500
ERZV07D201	200(185–225)	130	170	340	0.25	17.5	12.5	1750	1250	200
ERZV07D221	220(198–242)	140	180	360	0.25	19	13.5	1750	1250	190
ERZV07D241	240(216–264)	150	200	395	0.25	21	15	1750	1250	170
ERZV07D271	270(247–303)	175	225	455	0.25	24	17	1750	1250	150
ERZV07D331	330(297–363)	210	270	545	0.25	28	20	1750	1250	130
ERZV07D361	360(324–396)	230	300	595	0.25	32	23	1750	1250	130
ERZV07D391	390(351–429)	250	320	650	0.25	35	25	1750	1250	130
ERZV07D431	430(387–473)	275	350	710	0.25	40	27.5	1750	1250	120
ERZV07D471	470(423–517)	300	385	775	0.25	42	30	1750	1250	100
ERZV07D511	510(459–561)	320	410	845	0.25	45	32	1750	1250	90*

* Measured at 1 MHz

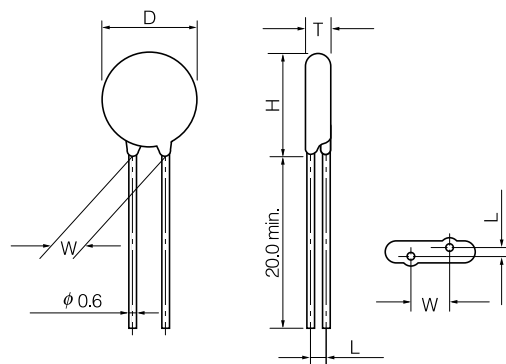
■ Dimensions in mm (not to scale) * Refer to page 118 to 120 about leads cut type and taping.

ERZV07D180 to ERZV07D680

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	8.5	4.6	5.0±1.0	11.5	1.4±1.0
ERZV07D270	8.5	4.7	5.0±1.0	11.5	1.5±1.0
ERZV07D330	8.5	4.9	5.0±1.0	11.5	1.7±1.0
ERZV07D390	8.5	4.8	5.0±1.0	11.5	1.6±1.0
ERZV07D470	8.5	4.9	5.0±1.0	11.5	1.7±1.0
ERZV07D560	8.5	5.0	5.0±1.0	11.5	1.8±1.0
ERZV07D680	8.5	5.2	5.0±1.0	11.5	2.0±1.0

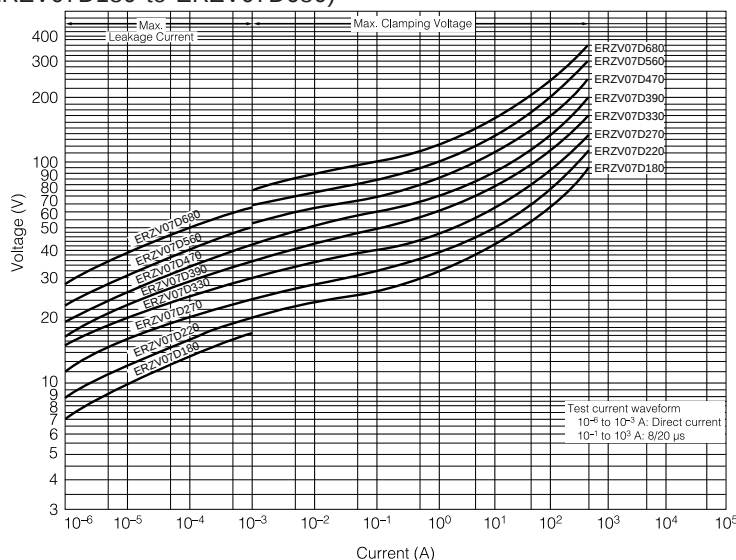
ERZV07D820 to ERZV07D511

Part No.	D max.	T max.	W	H max.	L
ERZV07D820	8.5	4.1	5.0±1.0	11.5	1.4±1.0
ERZV07D101	8.5	4.3	5.0±1.0	11.5	1.6±1.0
ERZV07D121	8.5	4.5	5.0±1.0	11.5	1.8±1.0
ERZV07D151	8.5	4.8	5.0±1.0	11.5	2.1±1.0
ERZV07D201	8.5	4.4	5.0±1.0	11.5	1.7±1.0
ERZV07D221	8.5	4.5	5.0±1.0	11.5	1.8±1.0
ERZV07D241	8.5	4.6	5.0±1.0	11.5	1.9±1.0
ERZV07D271	8.5	4.8	5.0±1.0	11.5	2.1±1.0
ERZV07D331	8.5	5.1	5.0±1.0	11.5	2.4±1.0
ERZV07D361	8.5	5.3	5.0±1.0	11.5	2.5±1.0
ERZV07D391	8.5	5.4	5.0±1.0	11.5	2.7±1.0
ERZV07D431	8.5	5.6	5.0±1.0	11.5	2.9±1.0
ERZV07D471	8.5	5.8	5.0±1.0	11.5	3.1±1.0
ERZV07D511	8.5	6.0	5.0±1.0	11.5	3.3±1.0

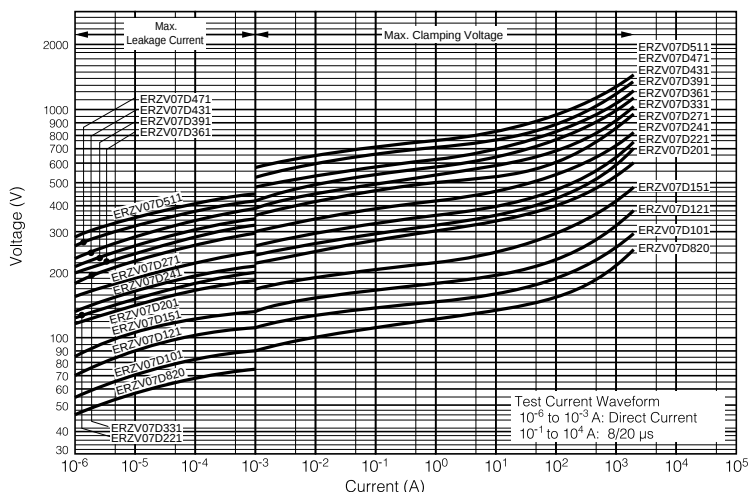


■ Typical Characteristics Voltage vs. Current

(ERZV07D180 to ERZV07D680)

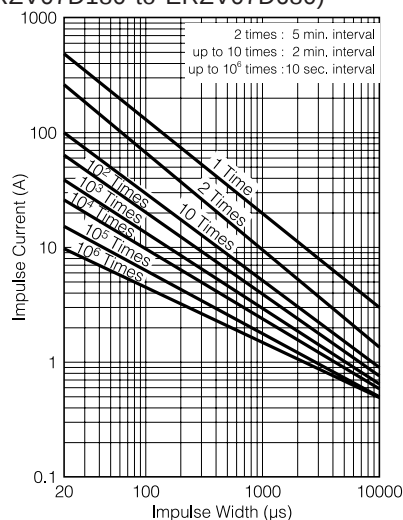


(ERZV07D820 to ERZV07D511)

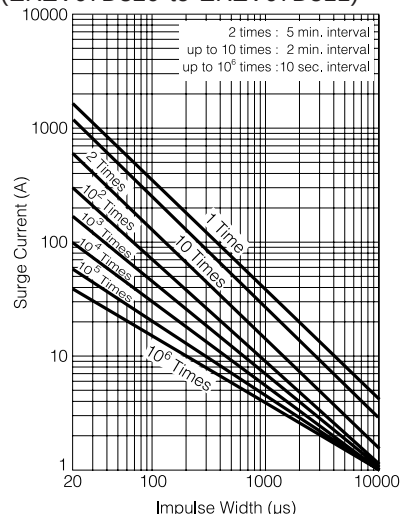


Impulse Deratings (Relation between impulse width and impulse repetition times)

(ERZV07D180 to ERZV07D680)



(ERZV07D820 to ERZV07D511)



Design, Specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use. Whenever a doubt about safety arises from this product, please inform us immediately for technical consultation without fail.