

5 Series

■ Ratings and Characteristics

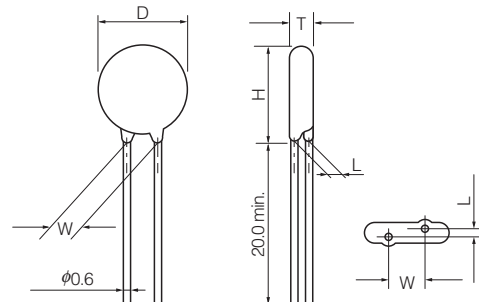
● Operating Temperature Range : -40 to 85 °C ● Storage Temperature Range : -40 to 125 °C

| Part No. | Varistor Voltage | Maximum Allowable Voltage | | Clamping Voltage (max.) **I _p | Rated Power | Maximum Energy | | Maximum Peak Current (8/20 μs) | | Capacitance (max.) @1 kHz (pF) |
|------------|-------------------------|---------------------------|--------|---|-------------|----------------|--------|--------------------------------|---------|-----------------------------------|
| | | | | | | (10/1000 μs) | (2 ms) | 1 time | 2 times | |
| | V _{0.1 mA} (V) | ACrms (V) | DC (V) | (V) | (W) | (J) | (J) | (A) | (A) | |
| ERZV05D180 | 18(16 to 20) | 11 | 14 | 40 | 0.01 | 0.6 | 0.4 | 250 | 125 | 1600 |
| ERZV05D220 | 22(20 to 24) | 14 | 18 | 48 | 0.01 | 0.7 | 0.5 | 250 | 125 | 1500 |
| ERZV05D270 | 27(24 to 30) | 17 | 22 | 60 | 0.01 | 0.9 | 0.7 | 250 | 125 | 1450 |
| ERZV05D330 | 33(30 to 36) | 20 | 26 | 73 | 0.01 | 1.1 | 0.8 | 250 | 125 | 1400 |
| ERZV05D390 | 39(35 to 43) | 25 | 31 | 86 | 0.01 | 1.2 | 0.9 | 250 | 125 | 700 |
| ERZV05D470 | 47(42 to 52) | 30 | 38 | 104 | 0.01 | 1.5 | 1.1 | 250 | 125 | 650 |
| ERZV05D560 | 56(50 to 62) | 35 | 45 | 123 | 0.01 | 1.8 | 1.3 | 250 | 125 | 600 |
| ERZV05D680 | 68(61 to 75) | 40 | 56 | 150 | 0.01 | 2.2 | 1.6 | 250 | 125 | 580 |
| ERZV05D820 | 82(74 to 90) | 50 | 65 | 145 | 0.1 | 3.5 | 2.5 | 800 | 600 | 460 |
| ERZV05D101 | 100(90 to 110) | 60 | 85 | 175 | 0.1 | 4.0 | 3.0 | 800 | 600 | 400 |
| ERZV05D121 | 120(108 to 132) | 75 | 100 | 210 | 0.1 | 5.0 | 3.5 | 800 | 600 | 350 |
| ERZV05D151 | 150(135 to 165) | 95 | 125 | 260 | 0.1 | 6.5 | 4.5 | 800 | 600 | 300 |
| ERZV05D201 | 200(185 to 225) | 130 | 170 | 355 | 0.1 | 8.5 | 6.0 | 800 | 600 | 120 |
| ERZV05D221 | 220(198 to 242) | 140 | 180 | 380 | 0.1 | 9.0 | 6.5 | 800 | 600 | 110 |
| ERZV05D241 | 240(216 to 264) | 150 | 200 | 415 | 0.1 | 10.5 | 7.5 | 800 | 600 | 100 |
| ERZV05D271 | 270(247 to 303) | 175 | 225 | 475 | 0.1 | 11.0 | 8.0 | 800 | 600 | 90* |
| ERZV05D331 | 330(297 to 363) | 210 | 270 | 570 | 0.1 | 13.0 | 9.5 | 800 | 600 | 80* |
| ERZV05D361 | 360(324 to 396) | 230 | 300 | 620 | 0.1 | 16.0 | 11.0 | 800 | 600 | 80* |
| ERZV05D391 | 390(351 to 429) | 250 | 320 | 675 | 0.1 | 17.0 | 12.0 | 800 | 600 | 80* |
| ERZV05D431 | 430(387 to 473) | 275 | 350 | 745 | 0.1 | 20.0 | 13.5 | 800 | 600 | 70* |
| ERZV05D471 | 470(423 to 517) | 300 | 385 | 810 | 0.1 | 21.0 | 15.0 | 800 | 600 | 60* |

* Measured at 1 MHz **I_p Measuring current of clamping voltage 180 to 680 : 1 A, 820 to 471 : 5 A

■ Dimensions in mm (not to scale) * Refer to page 99 to 100 about leads cut type and taping.

| Part No. | D max. | T max. | W±1.0 | H max. | L±1.0 |
|------------|--------|--------|-------|--------|-------|
| ERZV05D180 | 7.0 | 4.5 | 5.0 | 10.0 | 1.5 |
| ERZV05D220 | 7.0 | 4.5 | 5.0 | 10.0 | 1.5 |
| ERZV05D270 | 7.0 | 4.5 | 5.0 | 10.0 | 1.5 |
| ERZV05D330 | 7.0 | 4.5 | 5.0 | 10.0 | 1.5 |
| ERZV05D390 | 7.0 | 4.5 | 5.0 | 10.0 | 1.5 |
| ERZV05D470 | 7.0 | 4.5 | 5.0 | 10.0 | 1.5 |
| ERZV05D560 | 7.0 | 4.5 | 5.0 | 10.0 | 1.5 |
| ERZV05D680 | 7.0 | 4.5 | 5.0 | 10.0 | 1.5 |
| ERZV05D820 | 7.0 | 4.1 | 5.0 | 10.0 | 1.4 |
| ERZV05D101 | 7.0 | 4.3 | 5.0 | 10.0 | 1.6 |
| ERZV05D121 | 7.0 | 4.5 | 5.0 | 10.0 | 1.8 |
| ERZV05D151 | 7.0 | 4.8 | 5.0 | 10.0 | 2.1 |
| ERZV05D201 | 7.0 | 4.4 | 5.0 | 10.0 | 1.7 |
| ERZV05D221 | 7.0 | 4.5 | 5.0 | 10.0 | 1.8 |
| ERZV05D241 | 7.0 | 4.6 | 5.0 | 10.0 | 1.9 |
| ERZV05D271 | 7.0 | 4.8 | 5.0 | 10.0 | 2.1 |
| ERZV05D331 | 7.0 | 5.1 | 5.0 | 10.0 | 2.4 |
| ERZV05D361 | 7.0 | 5.3 | 5.0 | 10.0 | 2.5 |
| ERZV05D391 | 7.0 | 5.4 | 5.0 | 10.0 | 2.7 |
| ERZV05D431 | 7.0 | 5.6 | 5.0 | 10.0 | 2.9 |
| ERZV05D471 | 7.0 | 5.8 | 5.0 | 10.0 | 3.1 |



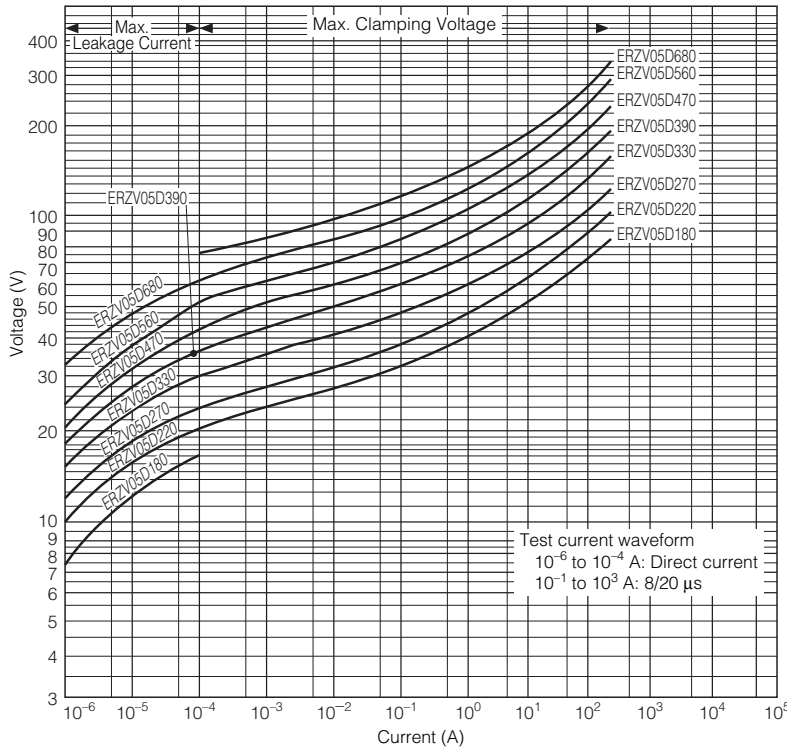
Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

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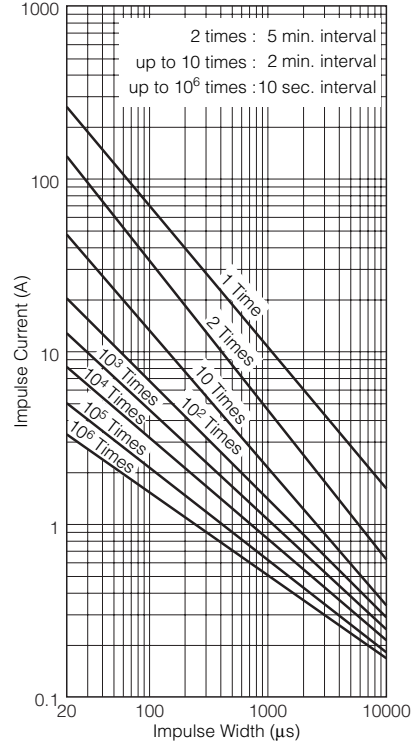
Typical Characteristics Voltage vs. Current

Impulse Derating (Relation between impulse width and impulse current multiple)

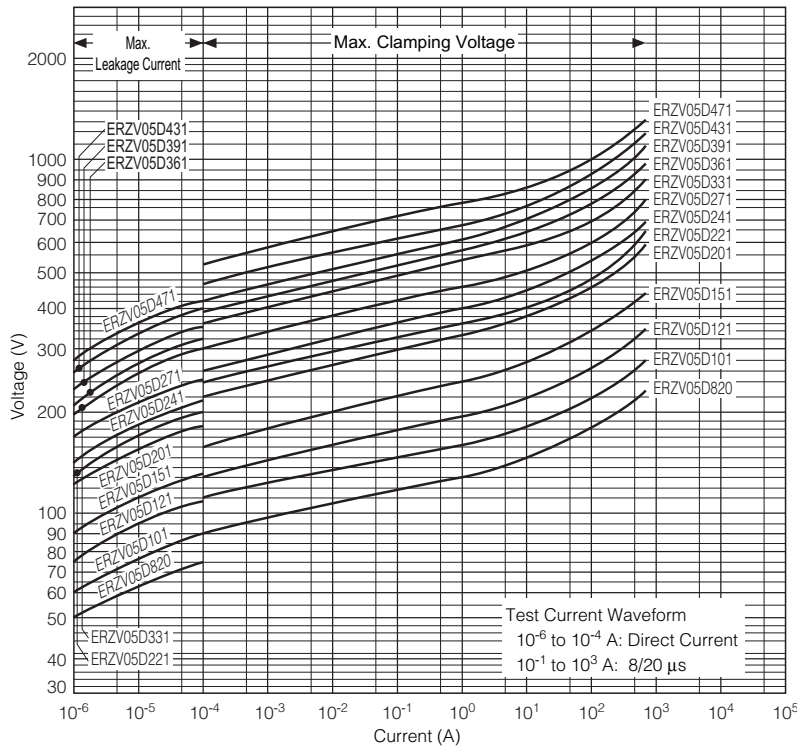
ERZV05D180 to ERZV05D680



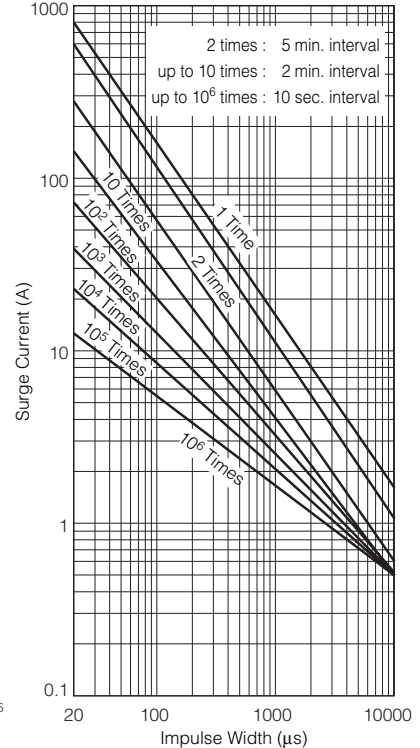
ERZV05D180 to ERZV05D680



ERZV05D820 to ERZV05D471



ERZV05D820 to ERZV05D471



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