

Z10D Series

Specifications

| Part No. | Varistor Voltage | Maximum Allowable Voltage | | Clamping Voltage (max.) | Rated Power | Maximum Energy | | Maximum Peak Current (8/20 μ s) | | Capacitance (max.) 1kHz |
|-----------|----------------------|---------------------------|-------|-------------------------|-------------|-------------------|-------|-------------------------------------|---------|-------------------------|
| | | | | | | (10/1000 μ s) | (2ms) | 1 time | 2 times | |
| | | | | | | (J) | (J) | (A) | (A) | |
| | V _{1mA} (V) | AC _{rms} (V) | DC(V) | V(V) | (W) | (J) | (J) | (A) | (A) | (pF) |
| Z10D180 | 18(16-20) | 11 | 14 | 36 at 5A | 0.05 | 2.6 | 2.2 | 1000 | 500 | 16000 |
| Z10D220 | 22(20-24) | 14 | 18 | 43 | 0.05 | 3.2 | 2.6 | 1000 | 500 | 11000 |
| Z10D270 | 27(24-30) | 17 | 22 | 53 | 0.05 | 3.9 | 3.2 | 1000 | 500 | 8000 |
| Z10D330 | 33(30-36) | 20 | 26 | 65 | 0.05 | 4.8 | 4.0 | 1000 | 500 | 6300 |
| Z10D390 | 39(35-43) | 25 | 31 | 77 | 0.05 | 5.6 | 4.7 | 1000 | 500 | 5200 |
| Z10D470 | 47(42-52) | 30 | 38 | 93 | 0.05 | 6.8 | 5.6 | 1000 | 500 | 4600 |
| Z10D560 | 56(50-62) | 35 | 45 | 110 | 0.05 | 8.1 | 6.7 | 1000 | 500 | 3750 |
| Z10D680 | 68(61-75) | 40 | 56 | 135 | 0.05 | 9.8 | 8.2 | 1000 | 500 | 2800 |
| * Z10D820 | 82(74-90) | 50 | 65 | 135 at 25A | 0.4 | 14 | 10 | 3500 | 2500 | 2000 |
| * Z10D101 | 100(90-110) | 60 | 85 | 165 | 0.4 | 17 | 12 | 3500 | 2500 | 1700 |
| * Z10D121 | 120(108-132) | 75 | 100 | 200 | 0.4 | 20 | 14.5 | 3500 | 2500 | 1400 |
| * Z10D151 | 150(135-165) | 95 | 125 | 250 | 0.4 | 25 | 18 | 3500 | 2500 | 1100 |
| * Z10D201 | 200(185-225) | 130 | 170 | 340 | 0.4 | 35 | 25 | 3500 | 2500 | 430 |
| * Z10D221 | 220(198-242) | 140 | 180 | 360 | 0.4 | 39 | 27.5 | 3500 | 2500 | 410 |
| * Z10D241 | 240(216-264) | 150 | 200 | 395 | 0.4 | 42 | 30 | 3500 | 2500 | 380 |
| * Z10D271 | 270(247-303) | 175 | 225 | 455 | 0.4 | 49 | 35 | 3500 | 2500 | 350 |
| * Z10D331 | 330(297-363) | 210 | 270 | 545 | 0.4 | 58 | 42 | 3500 | 2500 | 300 |
| * Z10D361 | 360(324-396) | 230 | 300 | 595 | 0.4 | 65 | 45 | 3500 | 2500 | 300 |
| * Z10D391 | 390(351-429) | 250 | 320 | 650 | 0.4 | 70 | 50 | 3500 | 2500 | 300 |
| * Z10D431 | 430(387-473) | 275 | 350 | 710 | 0.4 | 80 | 55 | 3500 | 2500 | 270 |
| * Z10D471 | 470(423-517) | 300 | 385 | 775 | 0.4 | 85 | 60 | 3500 | 2500 | 230 |
| * Z10D511 | 510(459-561) | 320 | 410 | 845 | 0.4 | 92 | 67 | 3500 | 2500 | 210 |
| * Z10D561 | 560(504-616) | 350 | 450 | 930 | 0.4 | 92 | 67 | 3500 | 2500 | 200 |
| * Z10D681 | 680(612-748) | 420 | 560 | 1120 | 0.4 | 92 | 67 | 3500 | 2500 | 170 |
| * Z10D751 | 750(675-825) | 460 | 615 | 1240 | 0.4 | 100 | 70 | 3500 | 2500 | 160 |
| * Z10D821 | 820(738-902) | 510 | 670 | 1355 | 0.4 | 110 | 80 | 3500 | 2500 | 140 |
| * Z10D911 | 910(819-1001) | 550 | 745 | 1500 | 0.4 | 130 | 90 | 3500 | 2500 | 120 |
| * Z10D102 | 1000(900-1100) | 625 | 825 | 1650 | 0.4 | 140 | 100 | 3500 | 2500 | 110 |

Z15D Series

Specifications

| Part No. | Varistor Voltage | Maximum Allowable Voltage | | Clamping Voltage (max.) | Rated Power | Maximum Energy | | Maximum Peak Current (8/20 μ s) | | Capacitance (max.) 1kHz |
|-----------|----------------------|---------------------------|-------|-------------------------|-------------|-------------------|-------|-------------------------------------|---------|-------------------------|
| | | | | | | (10/1000 μ s) | (2ms) | 1 time | 2 times | |
| | | | | | | (J) | (J) | (A) | (A) | |
| | V _{1mA} (V) | AC _{rms} (V) | DC(V) | V(V) | (W) | (J) | (J) | (A) | (A) | (pF) |
| Z15D180 | 18(16-20) | 11 | 14 | 36 at 10A | 0.1 | 5.2 | 4.3 | 2000 | 1000 | 25000 |
| Z15D220 | 22(20-24) | 14 | 18 | 43 | 0.1 | 6.3 | 5.3 | 2000 | 1000 | 20000 |
| Z15D270 | 27(24-30) | 17 | 22 | 53 | 0.1 | 7.8 | 6.5 | 2000 | 1000 | 16000 |
| Z15D330 | 33(30-36) | 20 | 26 | 65 | 0.1 | 9.5 | 7.9 | 2000 | 1000 | 12200 |
| Z15D390 | 39(35-43) | 25 | 31 | 77 | 0.1 | 11 | 9.4 | 2000 | 1000 | 7000 |
| Z15D470 | 47(42-52) | 30 | 38 | 93 | 0.1 | 14 | 11 | 2000 | 1000 | 6750 |
| Z15D560 | 56(50-62) | 35 | 45 | 110 | 0.1 | 16 | 13 | 2000 | 1000 | 6500 |
| Z15D680 | 68(61-75) | 40 | 56 | 135 | 0.1 | 20 | 16 | 2000 | 1000 | 5500 |
| * Z15D820 | 82(74-90) | 50 | 65 | 135 at 50A | 0.6 | 28 | 20 | 6000 | 4500 | 3700 |
| * Z15D101 | 100(90-110) | 60 | 85 | 165 | 0.6 | 35 | 25 | 6000 | 4500 | 3200 |
| * Z15D121 | 120(108-132) | 75 | 100 | 200 | 0.6 | 42 | 30 | 6000 | 4500 | 2700 |
| * Z15D151 | 150(135-165) | 95 | 125 | 250 | 0.6 | 53 | 37.5 | 6000 | 4500 | 2200 |
| * Z15D201 | 200(185-225) | 130 | 170 | 340 | 0.6 | 70 | 50 | 6000 | 4500 | 770 |
| * Z15D221 | 220(198-242) | 140 | 180 | 360 | 0.6 | 78 | 55 | 6000 | 4500 | 740 |
| * Z15D241 | 240(216-264) | 150 | 200 | 395 | 0.6 | 84 | 60 | 6000 | 4500 | 700 |
| * Z15D271 | 270(247-303) | 175 | 225 | 455 | 0.6 | 99 | 70 | 6000 | 4500 | 640 |
| * Z15D331 | 330(297-363) | 210 | 270 | 545 | 0.6 | 115 | 80 | 6000 | 4500 | 580 |
| * Z15D361 | 360(324-396) | 230 | 300 | 595 | 0.6 | 130 | 90 | 6000 | 4500 | 540 |
| * Z15D391 | 390(351-429) | 250 | 320 | 650 | 0.6 | 140 | 100 | 6000 | 4500 | 500 |
| * Z15D431 | 430(387-473) | 275 | 350 | 710 | 0.6 | 155 | 110 | 6000 | 4500 | 450 |
| * Z15D471 | 470(423-517) | 300 | 385 | 775 | 0.6 | 175 | 125 | 6000 | 4500 | 400 |
| * Z15D511 | 510(459-561) | 320 | 410 | 845 | 0.6 | 190 | 136 | 6000 | 4500 | 350 |
| * Z15D561 | 560(504-616) | 350 | 450 | 930 | 0.6 | 190 | 136 | 6000 | 4500 | 340 |
| * Z15D681 | 680(612-748) | 420 | 560 | 1120 | 0.6 | 190 | 136 | 5000 | 4500 | 320 |
| * Z15D751 | 750(675-825) | 460 | 615 | 1240 | 0.6 | 210 | 150 | 5000 | 4500 | 310 |
| * Z15D821 | 820(738-902) | 510 | 670 | 1355 | 0.6 | 235 | 165 | 5000 | 4500 | 280 |
| * Z15D911 | 910(819-1001) | 550 | 745 | 1500 | 0.6 | 255 | 180 | 5000 | 4500 | 250 |
| * Z15D102 | 1000(900-1100) | 625 | 825 | 1650 | 0.6 | 280 | 200 | 5000 | 4500 | 230 |

1. Operating temperature range: -40 to 85°C
 2. Storage temperature range: -40 to 125°C
- * UL 1449 approved model