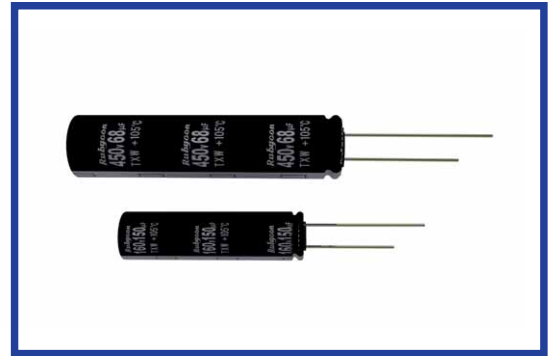


TXW SERIES

105°C Long Life(7000~12000 hours), Miniaturized

•Temperature Range : -40°C~+105°C



SPECIFICATIONS

| Items | Characteristics | |
|--|---|---|
| Category Temperature Range | -40~+105°C | |
| Rated Voltage Range | 35~100Vdc | 160~450Vdc |
| Capacitance Tolerance | ±20% (20°C, 120Hz) | |
| Leakage Current(MAX) | I=0.01CV or 3μA whichever is greater. (After 2 minutes) | |
| | I=3√CV (After 5 minutes application of rated voltage) | |
| | I=Leakage Current(μA) | C=Capacitance(μF) V=Rated Voltage(Vdc) |
| Dissipation Factor(MAX) (tanδ) | Rated Voltage (V) | 35 50 63 80 100 160~400 420, 450 (20°C, 120Hz) |
| | tanδ | 0.12 0.10 0.09 0.08 0.08 0.20 0.25 |
| Endurance | After applying rated voltage with rated ripple current for specified time at 105°C, the capacitors shall meet the following requirements. | |
| | | 35~100Vdc 160~450Vdc |
| | Capacitance Change | Within ±25% of the initial value. Within ±20% of the initial value. |
| | Dissipation Factor | Not more than 200% of the specified value. |
| Leakage Current | Not more than the specified value. | |
| | Case Size | Life Time (hrs) |
| | φ6.3 | 7000 - |
| | φD≥8 | 10000 12000 |
| Low Temperature Stability Impedance Ratio(MAX) | Rated Voltage (Vdc) | 35 50 63 80 100 160~250 350, 400 420, 450 (120Hz) |
| | Z(-25°C)/Z(20°C) | 2 2 2 2 2 3 5 6 |
| | Z(-40°C)/Z(20°C) | 3 3 3 3 3 - - - |

MULTIPLIER FOR RIPPLE CURRENT

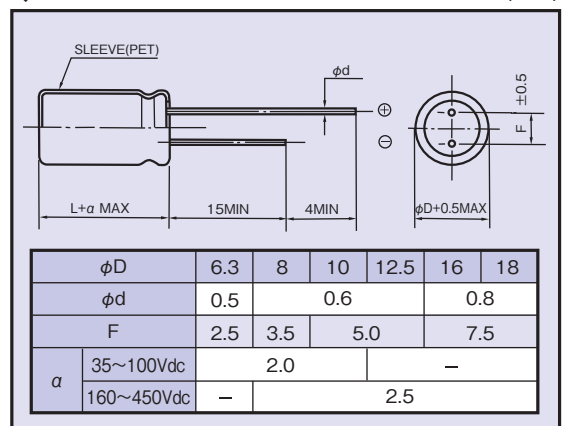
| 35~100Vdc | | | | | | |
|----------------|------------|------|------|-------|------|------|
| Frequency (Hz) | 120 | 1k | 10k | 100k≤ | | |
| Coefficient | 33μF | 0.42 | 0.70 | 0.90 | 1.00 | |
| | 39~270μF | 0.50 | 0.73 | 0.92 | 1.00 | |
| | 330~680μF | 0.55 | 0.77 | 0.94 | 1.00 | |
| | 820~1800μF | 0.60 | 0.80 | 0.96 | 1.00 | |
| 160~450Vdc | | | | | | |
| Frequency (Hz) | 60(50) | 120 | 500 | 1k | 10k≤ | |
| Coefficient | 160~250Vdc | 0.80 | 1.00 | 1.20 | 1.30 | 1.40 |
| | 350~450Vdc | 0.80 | 1.00 | 1.25 | 1.40 | 1.50 |

OPTION

| PET Sleeve | Code |
|------------|------|
| 35~100Vdc | EFC |
| 160~450Vdc | EFR* |

*PET Sleeve -25~+105°C (EFC) is also available, please consult our sales offices.

DIMENSIONS (mm)



PART NUMBER



◆STANDARD SIZE

| Rated Voltage (Vdc) | Capacitance (μF) | Size φD×L (mm) | Rated Ripple Current (A r.m.s./105°C) | |
|---------------------|------------------|----------------|---------------------------------------|--------|
| | | | 120Hz | 100kHz |
| 35 | 180 | 6.3×25 | 0.605 | 1.21 |
| | 220 | 6.3×30 | 0.685 | 1.37 |
| | 330 | 6.3×40 | 0.924 | 1.68 |
| | 390 | 6.3×50 | 1.11 | 2.02 |
| | 390 | 8×25 | 0.951 | 1.73 |
| | 470 | 8×30 | 1.11 | 2.03 |
| | 680 | 8×40 | 1.41 | 2.57 |
| | 820 | 8×50 | 1.82 | 3.04 |
| | 820 | 10×30 | 1.48 | 2.47 |
| | 1000 | 8×60 | 2.08 | 3.48 |
| | 1200 | 10×40 | 1.87 | 3.12 |
| | 1500 | 10×50 | 2.21 | 3.69 |
| 1800 | 10×60 | 2.50 | 4.17 | |
| 50 | 100 | 6.3×25 | 0.510 | 1.02 |
| | 120 | 6.3×30 | 0.580 | 1.16 |
| | 180 | 6.3×40 | 0.710 | 1.42 |
| | 220 | 6.3×50 | 0.860 | 1.72 |
| | 220 | 8×25 | 0.740 | 1.48 |
| | 270 | 8×30 | 0.870 | 1.74 |
| | 390 | 8×40 | 1.22 | 2.23 |
| | 470 | 8×50 | 1.45 | 2.65 |
| | 470 | 10×30 | 1.22 | 2.22 |
| | 560 | 8×60 | 1.68 | 3.07 |
| | 680 | 10×40 | 1.55 | 2.82 |
| | 820 | 10×50 | 2.02 | 3.37 |
| 1000 | 10×60 | 2.31 | 3.86 | |
| 63 | 82 | 6.3×25 | 0.455 | 0.910 |
| | 100 | 6.3×30 | 0.515 | 1.03 |
| | 150 | 6.3×40 | 0.635 | 1.27 |
| | 180 | 6.3×50 | 0.775 | 1.55 |
| | 180 | 8×25 | 0.665 | 1.33 |
| | 220 | 8×30 | 0.785 | 1.57 |
| | 330 | 8×40 | 1.11 | 2.02 |
| | 390 | 8×50 | 1.32 | 2.41 |
| | 390 | 10×30 | 1.16 | 2.10 |
| | 470 | 8×60 | 1.54 | 2.80 |
| | 560 | 10×40 | 1.43 | 2.60 |
| | 680 | 10×50 | 1.71 | 3.12 |
| 820 | 10×60 | 2.15 | 3.59 | |
| 80 | 47 | 6.3×25 | 0.455 | 0.910 |
| | 56 | 6.3×30 | 0.515 | 1.03 |
| | 82 | 6.3×40 | 0.635 | 1.27 |
| | 100 | 6.3×50 | 0.775 | 1.55 |
| | 100 | 8×25 | 0.665 | 1.33 |
| | 120 | 8×30 | 0.785 | 1.57 |
| | 180 | 8×40 | 1.01 | 2.02 |
| | 220 | 8×50 | 1.20 | 2.41 |
| | 220 | 10×30 | 1.05 | 2.10 |
| | 270 | 8×60 | 1.40 | 2.80 |
| | 270 | 10×40 | 1.30 | 2.60 |
| | 390 | 10×50 | 1.71 | 3.12 |
| 470 | 10×60 | 1.97 | 3.59 | |
| 100 | 33 | 6.3×25 | 0.382 | 0.910 |
| | 39 | 6.3×30 | 0.515 | 1.03 |
| | 56 | 6.3×40 | 0.635 | 1.27 |
| | 68 | 6.3×50 | 0.775 | 1.55 |
| | 82 | 8×25 | 0.665 | 1.33 |
| | 100 | 8×30 | 0.785 | 1.57 |
| | 120 | 8×40 | 1.01 | 2.02 |
| | 150 | 8×50 | 1.20 | 2.41 |
| | 150 | 10×30 | 1.05 | 2.10 |
| | 150 | 10×30 | 1.05 | 2.10 |

| Rated Voltage (Vdc) | Capacitance (μF) | Size φD×L (mm) | Rated Ripple Current (A r.m.s./105°C) | |
|---------------------|------------------|----------------|---------------------------------------|--------|
| | | | 120Hz | 100kHz |
| 100 | 220 | 8×60 | 1.40 | 2.80 |
| | 220 | 10×40 | 1.30 | 2.60 |
| | 270 | 10×50 | 1.56 | 3.12 |
| | 330 | 10×60 | 1.97 | 3.59 |
| | 330 | 10×60 | 1.97 | 3.59 |
| 160 | 56 | 8×25 | 0.32 | 0.448 |
| | 68 | 8×30 | 0.37 | 0.518 |
| | 82 | 8×35 | 0.43 | 0.602 |
| | 82 | 10×25 | 0.43 | 0.602 |
| | 100 | 8×40 | 0.49 | 0.686 |
| | 120 | 8×55 | 0.57 | 0.798 |
| | 120 | 10×30 | 0.54 | 0.756 |
| | 150 | 10×40 | 0.67 | 0.938 |
| | 150 | 12.5×25 | 0.66 | 0.924 |
| | 180 | 10×50 | 0.80 | 1.12 |
| | 180 | 12.5×30 | 0.77 | 1.07 |
| | 220 | 10×60 | 0.94 | 1.31 |
| | 220 | 12.5×35 | 0.89 | 1.24 |
| | 220 | 16×25 | 0.93 | 1.30 |
| | 270 | 12.5×40 | 1.01 | 1.41 |
| | 330 | 12.5×50 | 1.20 | 1.68 |
| | 330 | 16×30 | 1.20 | 1.68 |
| | 330 | 18×25 | 1.18 | 1.65 |
| | 390 | 12.5×55 | 1.35 | 1.89 |
| | 390 | 16×35 | 1.34 | 1.87 |
| | 390 | 18×30 | 1.40 | 1.96 |
| | 470 | 16×40 | 1.52 | 2.12 |
| 470 | 18×35 | 1.58 | 2.21 | |
| 560 | 16×50 | 1.79 | 2.50 | |
| 560 | 18×40 | 1.78 | 2.49 | |
| 680 | 18×45 | 2.00 | 2.80 | |
| 820 | 18×50 | 2.23 | 3.12 | |
| 200 | 39 | 8×25 | 0.30 | 0.420 |
| | 56 | 8×30 | 0.37 | 0.518 |
| | 68 | 8×40 | 0.45 | 0.630 |
| | 68 | 10×25 | 0.43 | 0.602 |
| | 82 | 8×45 | 0.51 | 0.714 |
| | 82 | 10×30 | 0.50 | 0.700 |
| | 100 | 8×55 | 0.60 | 0.840 |
| | 100 | 10×40 | 0.63 | 0.882 |
| | 120 | 10×45 | 0.75 | 1.05 |
| | 120 | 12.5×25 | 0.65 | 0.910 |
| | 150 | 10×50 | 0.83 | 1.16 |
| | 150 | 12.5×30 | 0.80 | 1.12 |
| | 180 | 10×60 | 0.91 | 1.27 |
| | 180 | 12.5×35 | 0.92 | 1.28 |
| | 180 | 16×25 | 0.85 | 1.19 |
| | 220 | 12.5×45 | 1.09 | 1.52 |
| | 220 | 16×30 | 1.01 | 1.41 |
| | 220 | 18×25 | 1.00 | 1.40 |
| | 270 | 12.5×50 | 1.26 | 1.76 |
| | 270 | 16×30 | 1.18 | 1.65 |
| | 270 | 18×30 | 1.16 | 1.62 |
| | 330 | 12.5×60 | 1.36 | 1.90 |
| 330 | 16×40 | 1.31 | 1.83 | |
| 330 | 18×30 | 1.30 | 1.82 | |
| 390 | 16×45 | 1.43 | 2.00 | |
| 390 | 18×35 | 1.43 | 2.00 | |
| 470 | 16×50 | 1.58 | 2.21 | |
| 470 | 18×40 | 1.58 | 2.21 | |
| 560 | 18×45 | 1.77 | 2.47 | |

◆STANDARD SIZE

| Rated Voltage (Vdc) | Capacitance (μF) | Size φD×L (mm) | Rated Ripple Current (A r.m.s./105°C) | |
|---------------------|------------------|----------------|---------------------------------------|--------|
| | | | 120Hz | 100kHz |
| 220 | 100 | 10×40 | 0.66 | 0.924 |
| | 120 | 10×45 | 0.75 | 1.05 |
| | 120 | 12.5×30 | 0.74 | 1.03 |
| | 150 | 12.5×35 | 0.86 | 1.20 |
| | 150 | 16×25 | 0.80 | 1.12 |
| | 180 | 12.5×40 | 0.99 | 1.38 |
| | 180 | 16×30 | 0.94 | 1.31 |
| | 220 | 12.5×50 | 1.08 | 1.51 |
| | 220 | 16×30 | 1.01 | 1.41 |
| | 220 | 18×25 | 0.94 | 1.31 |
| | 270 | 16×35 | 1.19 | 1.66 |
| | 270 | 18×30 | 1.13 | 1.58 |
| | 330 | 18×35 | 1.30 | 1.82 |
| | 390 | 18×40 | 1.49 | 2.08 |
| | 470 | 18×45 | 1.69 | 2.36 |
| | 250 | 27 | 8×25 | 0.30 |
| 39 | | 8×30 | 0.37 | 0.518 |
| 47 | | 8×35 | 0.45 | 0.630 |
| 47 | | 10×25 | 0.37 | 0.518 |
| 56 | | 8×40 | 0.51 | 0.714 |
| 56 | | 10×30 | 0.42 | 0.588 |
| 68 | | 8×50 | 0.59 | 0.826 |
| 68 | | 10×35 | 0.49 | 0.686 |
| 82 | | 10×40 | 0.61 | 0.854 |
| 82 | | 12.5×25 | 0.54 | 0.756 |
| 100 | | 10×45 | 0.68 | 0.952 |
| 100 | | 12.5×30 | 0.69 | 0.966 |
| 120 | | 10×55 | 0.73 | 1.02 |
| 120 | | 12.5×35 | 0.79 | 1.10 |
| 120 | | 16×25 | 0.74 | 1.03 |
| 150 | | 12.5×40 | 0.92 | 1.28 |
| 150 | | 16×30 | 0.89 | 1.24 |
| 180 | | 12.5×50 | 0.97 | 1.35 |
| 180 | | 16×30 | 0.95 | 1.33 |
| 180 | | 18×25 | 0.88 | 1.23 |
| 220 | | 12.5×55 | 1.13 | 1.58 |
| 220 | | 16×35 | 1.11 | 1.55 |
| 220 | | 18×30 | 1.10 | 1.54 |
| 270 | | 16×40 | 1.27 | 1.77 |
| 270 | 18×35 | 1.23 | 1.72 | |
| 330 | 16×50 | 1.48 | 2.07 | |
| 330 | 18×40 | 1.42 | 1.98 | |
| 390 | 18×45 | 1.59 | 2.22 | |
| 470 | 18×50 | 1.83 | 2.56 | |
| 350 | 22 | 8×30 | 0.25 | 0.375 |
| | 27 | 8×35 | 0.29 | 0.435 |
| | 33 | 8×40 | 0.33 | 0.495 |
| | 33 | 10×25 | 0.31 | 0.465 |
| | 39 | 8×45 | 0.37 | 0.555 |
| | 39 | 10×30 | 0.36 | 0.540 |
| | 47 | 8×60 | 0.43 | 0.645 |
| | 47 | 10×35 | 0.41 | 0.615 |
| | 56 | 10×40 | 0.47 | 0.705 |
| | 68 | 10×55 | 0.55 | 0.825 |
| 400 | 12 | 8×25 | 0.17 | 0.255 |
| | 15 | 8×30 | 0.20 | 0.300 |
| | 18 | 8×35 | 0.23 | 0.345 |
| | 22 | 8×40 | 0.26 | 0.390 |
| | 22 | 10×25 | 0.24 | 0.360 |
| | 27 | 8×45 | 0.30 | 0.450 |

| Rated Voltage (Vdc) | Capacitance (μF) | Size φD×L (mm) | Rated Ripple Current (A r.m.s./105°C) | | |
|---------------------|------------------|----------------|---------------------------------------|--------|-------|
| | | | 120Hz | 100kHz | |
| 400 | 27 | 10×30 | 0.29 | 0.435 | |
| | 33 | 8×55 | 0.35 | 0.525 | |
| | 33 | 10×35 | 0.33 | 0.495 | |
| | 39 | 10×40 | 0.40 | 0.600 | |
| | 39 | 12.5×25 | 0.36 | 0.540 | |
| | 47 | 10×45 | 0.45 | 0.675 | |
| | 47 | 12.5×30 | 0.44 | 0.660 | |
| | 56 | 10×50 | 0.52 | 0.780 | |
| | 56 | 12.5×35 | 0.50 | 0.750 | |
| | 68 | 12.5×40 | 0.58 | 0.870 | |
| | 68 | 16×25 | 0.51 | 0.765 | |
| | 82 | 12.5×45 | 0.65 | 0.975 | |
| | 82 | 16×30 | 0.61 | 0.915 | |
| | 82 | 18×25 | 0.61 | 0.915 | |
| | 100 | 12.5×60 | 0.75 | 1.12 | |
| | 100 | 16×35 | 0.74 | 1.11 | |
| | 100 | 18×30 | 0.74 | 1.11 | |
| | 120 | 16×40 | 0.80 | 1.20 | |
| | 120 | 18×35 | 0.79 | 1.18 | |
| | 150 | 16×50 | 0.95 | 1.42 | |
| | 150 | 18×40 | 0.91 | 1.36 | |
| | 180 | 18×45 | 1.04 | 1.56 | |
| | 420 | 12 | 8×30 | 0.13 | 0.195 |
| | | 15 | 8×35 | 0.17 | 0.255 |
| 18 | | 8×40 | 0.20 | 0.300 | |
| 22 | | 8×50 | 0.25 | 0.375 | |
| 33 | | 10×40 | 0.37 | 0.555 | |
| 39 | | 10×45 | 0.41 | 0.615 | |
| 39 | | 12.5×30 | 0.39 | 0.585 | |
| 47 | | 12.5×35 | 0.45 | 0.675 | |
| 56 | | 12.5×40 | 0.52 | 0.780 | |
| 56 | | 16×25 | 0.46 | 0.690 | |
| 68 | | 12.5×45 | 0.58 | 0.870 | |
| 68 | | 16×30 | 0.55 | 0.825 | |
| 82 | | 12.5×50 | 0.66 | 0.990 | |
| 82 | | 16×35 | 0.63 | 0.945 | |
| 82 | | 18×25 | 0.56 | 0.840 | |
| 100 | | 16×40 | 0.73 | 1.09 | |
| 100 | | 18×30 | 0.67 | 1.00 | |
| 120 | | 18×35 | 0.77 | 1.15 | |
| 150 | 18×40 | 0.90 | 1.35 | | |
| 450 | 12 | 8×30 | 0.15 | 0.225 | |
| | 15 | 8×40 | 0.19 | 0.285 | |
| | 18 | 8×45 | 0.21 | 0.315 | |
| | 33 | 10×40 | 0.36 | 0.540 | |
| | 33 | 12.5×30 | 0.37 | 0.555 | |
| | 39 | 10×50 | 0.41 | 0.615 | |
| | 39 | 12.5×35 | 0.42 | 0.630 | |
| | 47 | 12.5×40 | 0.48 | 0.720 | |
| | 47 | 16×25 | 0.44 | 0.660 | |
| | 56 | 12.5×45 | 0.53 | 0.795 | |
| | 56 | 16×30 | 0.51 | 0.765 | |
| | 68 | 12.5×50 | 0.62 | 0.930 | |
| | 68 | 16×35 | 0.59 | 0.885 | |
| | 68 | 18×25 | 0.57 | 0.855 | |
| | 82 | 16×40 | 0.68 | 1.02 | |
| | 82 | 18×30 | 0.65 | 0.975 | |
| | 100 | 18×35 | 0.74 | 1.11 | |
| | 120 | 18×40 | 0.83 | 1.24 | |
| 150 | 18×45 | 0.95 | 1.42 | | |

*When ordering 8x55, 8x60, 10x55, 10x60 size, please consult our sales offices.