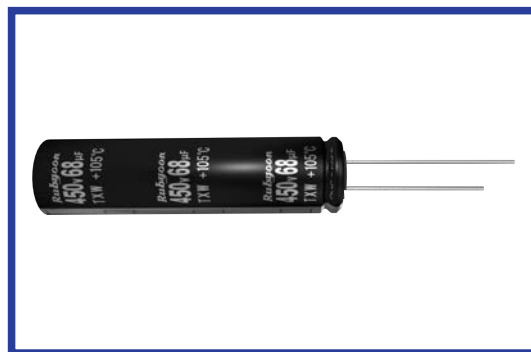


## TXW series

105℃ 長寿命(7000~12000時間) 小形化品 -40℃対応  
105℃ 7000~12000 hours, Miniaturized, -40℃~+105℃



### ◆規格表／SPECIFICATIONS

| 項目 Item  | 特性 Characteristics   |   |
|--|--|---|
| カテゴリ温度範囲<br>Category Temperature Range                                   | -40~+105℃  |   |
| 定格電圧範囲<br>Rated Voltage Range  | 35~100Vdc  | 160~450Vdc  |
| 静電容量許容差<br>Capacitance Tolerance   | ±20%(20℃, 120Hz)   |   |
| 漏れ電流<br>Leakage Current (MAX)  | 35~100Vdc  | 160~450Vdc  |
|  | I=0.01CV又は3μAのいずれか大なる値以下<br>(定格電圧印加2分後)<br>I=0.01CV or 3μA whichever is greater.<br>(After 2 minutes)  | I=3√CV以下(定格電圧印加5分後)<br>I=3√CV (After 5 minutes application of rated voltage)  |
|  | I=漏れ電流(μA) C=静電容量(μF) V=定格電圧(Vdc)<br>Leakage Current Capacitance Rated Voltage   |   |
| 損失角の正接(tan δ)<br>Dissipation Factor (MAX)                                | 定格電圧(Vdc)<br>Rated Voltage   | 35 50 63 80 100 160~400 420, 450 (20℃, 120Hz)   |
|  | tan δ  | 0.12 0.10 0.09 0.08 0.08 0.20 0.25  |
| 耐久性<br>Endurance   | 105℃中で右表の時間定格電圧(リプル重畳)印加後、下記項目を満足すること。<br>After applying rated voltage with rated ripple current for specified time at 105℃, the capacitors shall meet the following requirements. |   |
|  | 静電容量変化率<br>Capacitance Change  | 35~100Vdc: 初期値の±25%以内<br>Within ±25% of the initial value.<br>160~450Vdc: 初期値の±20%以内<br>Within ±20% of the initial value. |
|  | 損失角の正接<br>Dissipation Factor   | 規格値の200%以下<br>Not more than 200% of the specified value.  |
|  | 漏れ電流<br>Leakage Current  | 規格値以下<br>Not more than the specified value.   |
| 低温特性<br>Low Temperature Stability<br>(インピーダンス比)<br>Impedance Ratio (MAX) | 定格電圧(Vdc)<br>Rated Voltage   | 35 50 63 80 100 160~250 350, 400 420, 450 (120Hz)   |
|  | Z(-25℃)/Z(+20℃)  | 2 2 2 2 2 3 5 6   |
|  | Z(-40℃)/Z(+20℃)  | 3 3 3 3 3 - - -   |

### ◆呼称方法／PART NUMBER

|                       |                 |                     |                                  |               |                         |                     |
|-----------------------|-----------------|---------------------|----------------------------------|---------------|-------------------------|---------------------|
| □□□                   | TXW             | □□□□□               | M                                | □□□           | □□                      | D x L               |
| 定格電圧<br>Rated Voltage | シリーズ名<br>Series | 静電容量<br>Capacitance | 静電容量許容差<br>Capacitance Tolerance | 副記号<br>Option | リード加工記号<br>Lead Forming | ケースサイズ<br>Case Size |

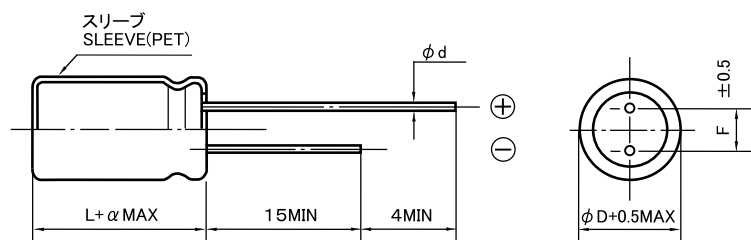
### ◆副記号／OPTION

35~100Vdc : EFC  
160~450Vdc : EFR

### ◆リプル電流補正係数／MULTIPLIER FOR RIPPLE CURRENT

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

◆寸法図／DIMENSIONS



(mm)

| φ D | 6.3        | 8   | 10  | 12.5 | 16  | 18  |
|-----|------------|-----|-----|------|-----|-----|
| φ d | 0.5        | 0.6 | 0.6 | 0.6  | 0.8 | 0.8 |
| F   | 2.5        | 3.5 | 5.0 | 5.0  | 7.5 | 7.5 |
| α   | 35~100Vdc  | 2.0 | 2.0 | 2.0  | 2.5 | 2.5 |
|     | 160~450Vdc | —   | —   | —    | —   | —   |

◆標準品一覧表／STANDARD SIZE

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>(μ F) | 外形寸法<br>Size<br>φ D × L (mm) | 定格リプル電流<br>Rated Ripple Current |        |
|--------------------------------|------------------------------|------------------------------|---------------------------------|--------|
|                                |                              |                              | 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   |
| 50                             | 1800                         | 10×60                        | 2.50                            | 4.17   |
|                                | 100                          | 6.3×25                       | 0.51                            | 1.02   |
|                                | 120                          | 6.3×30                       | 0.58                            | 1.16   |
|                                | 180                          | 6.3×40                       | 0.71                            | 1.42   |
|                                | 220                          | 6.3×50                       | 0.86                            | 1.72   |
|                                | 220                          | 8×25                         | 0.74                            | 1.48   |
|                                | 270                          | 8×30                         | 0.87                            | 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   |
| 63                             | 820                          | 10×50                        | 2.02                            | 3.37   |
|                                | 1000                         | 10×60                        | 2.31                            | 3.86   |
|                                | 82                           | 6.3×25                       | 0.455                           | 0.91   |
|                                | 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   |
| 80                             | 560                          | 10×40                        | 1.43                            | 2.60   |
|                                | 680                          | 10×50                        | 1.71                            | 3.12   |
|                                | 820                          | 10×60                        | 2.15                            | 3.59   |
|                                | 47                           | 6.3×25                       | 0.455                           | 0.91   |
|                                | 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   |

Rated Ripple Current (A r.m.s./105°C)

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>(μ F) | 外形寸法<br>Size<br>φ D × L (mm) | 定格リプル電流<br>Rated Ripple Current |        |
|--------------------------------|------------------------------|------------------------------|---------------------------------|--------|
|                                |                              |                              | 120Hz                           | 100kHz |
| 80                             | 390                          | 10×50                        | 1.71                            | 3.12   |
|                                | 470                          | 10×60                        | 1.97                            | 3.59   |
| 100                            | 33                           | 6.3×25                       | 0.382                           | 0.91   |
|                                | 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   |
|                                | 220                          | 8×60                         | 1.40                            | 2.80   |
|                                | 220                          | 10×40                        | 1.30                            | 2.60   |
|                                | 270                          | 10×50                        | 1.56                            | 3.12   |
| 160                            | 330                          | 10×60                        | 1.97                            | 3.59   |
|                                | 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   |
| 200                            | 680                          | 18×45                        | 2.00                            | 2.80   |
|                                | 820                          | 18×50                        | 2.23                            | 3.12   |
|                                | 39                           | 8×25                         | 0.30                            | 0.42   |
|                                | 56                           | 8×30                         | 0.37                            | 0.518  |
|                                | 68                           | 8×40                         | 0.45                            | 0.63   |
|                                | 68                           | 10×25                        | 0.43                            | 0.602  |
|                                | 82                           | 8×45                         | 0.51                            | 0.714  |
|                                | 82                           | 10×30                        | 0.50                            | 0.70   |
|                                | 100                          | 8×55                         | 0.60                            | 0.84   |
|                                | 100                          | 10×40                        | 0.63                            | 0.882  |

### ◆標準品一覧表／STANDARD SIZE

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>( $\mu$ F) | 外形寸法<br>Size<br>$\phi$ D $\times$ L (mm) | 定格リプル電流<br>Rated Ripple Current |        |
|--------------------------------|-----------------------------------|--|---------------------------------|--------|
|                                |                                   |  | 120Hz                           | 100kHz |
| 200                            | 120                               | 10x45                                    | 0.75                            | 1.05   |
|                                | 120                               | 12.5x25                                  | 0.65                            | 0.91   |
|                                | 150                               | 10x50                                    | 0.83                            | 1.16   |
|                                | 150                               | 12.5x30                                  | 0.80                            | 1.12   |
|                                | 180                               | 10x60                                    | 0.91                            | 1.27   |
|                                | 180                               | 12.5x35                                  | 0.92                            | 1.28   |
|                                | 180                               | 16x25                                    | 0.85                            | 1.19   |
|                                | 220                               | 12.5x45                                  | 1.09                            | 1.52   |
|                                | 220                               | 16x30                                    | 1.01                            | 1.41   |
|                                | 220                               | 18x25                                    | 1.00                            | 1.40   |
|                                | 270                               | 12.5x50                                  | 1.26                            | 1.76   |
|                                | 270                               | 16x30                                    | 1.18                            | 1.65   |
|                                | 270                               | 18x30                                    | 1.16                            | 1.62   |
|                                | 330                               | 12.5x60                                  | 1.36                            | 1.90   |
|                                | 330                               | 16x40                                    | 1.31                            | 1.83   |
|                                | 330                               | 18x30                                    | 1.30                            | 1.82   |
|                                | 390                               | 16x45                                    | 1.43                            | 2.00   |
|                                | 390                               | 18x35                                    | 1.43                            | 2.00   |
|                                | 470                               | 16x50                                    | 1.58                            | 2.21   |
|                                | 470                               | 18x40                                    | 1.58                            | 2.21   |
| 220                            | 100                               | 10x40                                    | 0.66                            | 0.924  |
|                                | 120                               | 10x45                                    | 0.75                            | 1.05   |
|                                | 120                               | 12.5x30                                  | 0.74                            | 1.03   |
|                                | 150                               | 12.5x35                                  | 0.86                            | 1.20   |
|                                | 150                               | 16x25                                    | 0.80                            | 1.12   |
|                                | 180                               | 12.5x40                                  | 0.99                            | 1.38   |
|                                | 180                               | 16x30                                    | 0.94                            | 1.31   |
|                                | 220                               | 12.5x50                                  | 1.08                            | 1.51   |
|                                | 220                               | 16x30                                    | 1.01                            | 1.41   |
|                                | 220                               | 18x25                                    | 0.94                            | 1.31   |
|                                | 270                               | 16x35                                    | 1.19                            | 1.66   |
|                                | 270                               | 18x30                                    | 1.13                            | 1.58   |
|                                | 330                               | 18x35                                    | 1.30                            | 1.82   |
|                                | 390                               | 18x40                                    | 1.49                            | 2.08   |
|                                | 470                               | 18x45                                    | 1.69                            | 2.36   |
| 250                            | 27                                | 8x25                                     | 0.30                            | 0.42   |
|                                | 39                                | 8x30                                     | 0.37                            | 0.518  |
|                                | 47                                | 8x35                                     | 0.45                            | 0.63   |
|                                | 47                                | 10x25                                    | 0.37                            | 0.518  |
|                                | 56                                | 8x40                                     | 0.51                            | 0.714  |
|                                | 56                                | 10x30                                    | 0.42                            | 0.588  |
|                                | 68                                | 8x50                                     | 0.59                            | 0.826  |
|                                | 68                                | 10x35                                    | 0.49                            | 0.686  |
|                                | 82                                | 10x40                                    | 0.61                            | 0.854  |
|                                | 82                                | 12.5x25                                  | 0.54                            | 0.756  |
|                                | 100                               | 10x45                                    | 0.68                            | 0.952  |
|                                | 100                               | 12.5x30                                  | 0.69                            | 0.966  |
|                                | 120                               | 10x55                                    | 0.73                            | 1.02   |
|                                | 120                               | 12.5x35                                  | 0.79                            | 1.10   |
|                                | 120                               | 16x25                                    | 0.74                            | 1.03   |
|                                | 150                               | 12.5x40                                  | 0.92                            | 1.28   |
|                                | 150                               | 16x30                                    | 0.89                            | 1.24   |
|                                | 180                               | 12.5x50                                  | 0.97                            | 1.35   |
|                                | 180                               | 16x30                                    | 0.95                            | 1.33   |
|                                | 180                               | 18x25                                    | 0.88                            | 1.23   |
|                                | 220                               | 12.5x55                                  | 1.13                            | 1.58   |
|                                | 220                               | 16x35                                    | 1.11                            | 1.55   |
|                                | 220                               | 18x30                                    | 1.10                            | 1.54   |
|                                | 270                               | 16x40                                    | 1.27                            | 1.77   |

Rated Ripple Current (A r.m.s./105°C)

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>( $\mu$ F)                    | 外形寸法<br>Size<br>$\phi$ D $\times$ L (mm) | 定格リプル電流<br>Rated Ripple Current |        |
|--------------------------------|--|--|---------------------------------|--------|
|                                |  |  | 120Hz                           | 100kHz |
| 250                            | 270  | 18x35                                    | 1.23                            | 1.72   |
|                                | 330  | 16x50                                    | 1.48                            | 2.07   |
|                                | 330  | 18x40                                    | 1.42                            | 1.98   |
|                                | 390  | 18x45                                    | 1.59                            | 2.22   |
|                                | 470  | 18x50                                    | 1.83                            | 2.56   |
| 350                            | 22   | 8x30                                     | 0.25                            | 0.375  |
|                                | 27   | 8x35                                     | 0.29                            | 0.435  |
|                                | 33   | 8x40                                     | 0.33                            | 0.495  |
|                                | 33   | 10x25                                    | 0.31                            | 0.465  |
|                                | 39   | 8x45                                     | 0.37                            | 0.555  |
|                                | 39   | 10x30                                    | 0.36                            | 0.54   |
|                                | 47   | 8x60                                     | 0.43                            | 0.645  |
|                                | 47   | 10x35                                    | 0.41                            | 0.615  |
|                                | 56   | 10x40                                    | 0.47                            | 0.705  |
|                                | 68   | 10x55                                    | 0.55                            | 0.825  |
| 400                            | 12   | 8x25                                     | 0.17                            | 0.255  |
|                                | 15   | 8x30                                     | 0.20                            | 0.300  |
|                                | 18   | 8x35                                     | 0.23                            | 0.345  |
|                                | 22   | 8x40                                     | 0.26                            | 0.39   |
|                                | 22   | 10x25                                    | 0.24                            | 0.36   |
|                                | 27   | 8x45                                     | 0.30                            | 0.45   |
|                                | 27   | 10x30                                    | 0.29                            | 0.435  |
|                                | 33   | 8x55                                     | 0.35                            | 0.525  |
|                                | 33   | 10x35                                    | 0.33                            | 0.495  |
|                                | 39   | 10x40                                    | 0.40                            | 0.60   |
|                                | 39   | 12.5x25                                  | 0.36                            | 0.54   |
|                                | 47   | 10x45                                    | 0.45                            | 0.675  |
|                                | 47   | 12.5x30                                  | 0.44                            | 0.66   |
|                                | 56   | 10x50                                    | 0.52                            | 0.78   |
|                                | 56   | 12.5x35                                  | 0.50                            | 0.75   |
|                                | 68   | 12.5x40                                  | 0.58                            | 0.87   |
|                                | 68   | 16x25                                    | 0.51                            | 0.765  |
|                                | 82   | 12.5x45                                  | 0.65                            | 0.975  |
|                                | 82   | 16x30                                    | 0.61                            | 0.915  |
|                                | 82   | 18x25                                    | 0.61                            | 0.915  |
|                                | 100  | 12.5x60                                  | 0.75                            | 1.12   |
|                                | 100  | 16x35                                    | 0.74                            | 1.11   |
|                                | 100  | 18x30                                    | 0.74                            | 1.11   |
|                                | 120  | 16x40                                    | 0.80                            | 1.20   |
|                                | 120  | 18x35                                    | 0.79                            | 1.18   |
|                                | 150  | 16x50                                    | 0.95                            | 1.42   |
|                                | 150  | 18x40                                    | 0.91                            | 1.36   |
|                                | 180  | 18x45                                    | 1.04                            | 1.56   |
| 420                            | この範囲はホームページをご参照ください。<br>Please refer to our website. |  |                                 |        |
| 450                            |  |  |                                 |        |