

## RS series

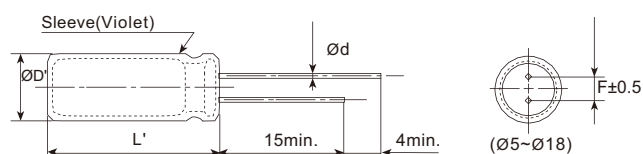
- High performance, high reliability
- Low impedance, high ripple current, long life
- Endurance: 4,000~10,000 hours at 105°C
- RoHS Compliant



### SPECIFICATIONS

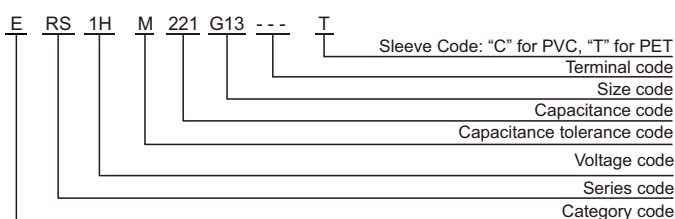
| Items                                                     | Characteristics                                                                                                                                                                             |      |                                               |      |      |      |      |      |          |                   |              |  |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------------------------------------------|------|------|------|------|------|----------|-------------------|--------------|--|
| Category Temperature Range                                | -40~+105°C                                                                                                                                                                                  |      |                                               |      |      |      |      |      |          |                   |              |  |
| Rated Voltage Range                                       | 6.3~120 V <sub>dc</sub>                                                                                                                                                                     |      |                                               |      |      |      |      |      |          |                   |              |  |
| Capacitance Tolerance                                     | ±20%(M) (at 20°C, 120Hz)                                                                                                                                                                    |      |                                               |      |      |      |      |      |          |                   |              |  |
| Leakage Current                                           | I≤0.01CV or 3μA, whichever is greater.<br>Where, I:Max.leakage current (μA),C:Nominal capacitance (μF),V: Rated voltage (V) (at 20°C after 2 minutes)                                       |      |                                               |      |      |      |      |      |          |                   |              |  |
| Dissipation Factor (tanδ)                                 | Rated Voltage(V <sub>dc</sub> )                                                                                                                                                             | 6.3  | 10                                            | 16   | 25   | 35   | 50   | 63   | 80       | 100               | 120          |  |
|                                                           | Dissipation Factor (Max.)                                                                                                                                                                   | 0.22 | 0.19                                          | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08     | 0.08              | 0.12         |  |
|                                                           | When nominal capacitance exceeds 1,000μF, add 0.02 to the value above for each 1,000μF increase. (at 20°C, 120Hz)                                                                           |      |                                               |      |      |      |      |      |          |                   |              |  |
| Low Temperature Characteristics<br>(Max. Impedance Ratio) | Rated Voltage(V <sub>dc</sub> )                                                                                                                                                             | 6.3  | 10                                            | 16   | 25   | 35   | 50   | 63   | 80       | 100               | 120          |  |
|                                                           | Z(-25°C)/Z(+20°C)                                                                                                                                                                           | 4    | 3                                             | 2    |      |      |      |      |          | 3                 |              |  |
|                                                           | Z(-40°C)/Z(+20°C)                                                                                                                                                                           | 8    | 6                                             | 4    | 3    |      |      |      |          |                   | 6 (at 120Hz) |  |
| Endurance                                                 | The specifications listed below shall be satisfied when the capacitors are restored to 20°C after DC voltage plus rated ripple current is applied for a specified period of time at 105 °C. |      |                                               |      |      |      |      |      |          |                   |              |  |
|                                                           | Capacitance Change                                                                                                                                                                          |      | ≤±20% of the initial value (6.3~10Vdc: ≤±30%) |      |      |      |      |      | Case Dia | Load life (hours) |              |  |
|                                                           | Dissipation Factor                                                                                                                                                                          |      | ≤200% of the initial specified value          |      |      |      |      |      | ØD≤6.3   | 4,000             | 5,000        |  |
|                                                           | Leakage Current                                                                                                                                                                             |      | ≤The initial specified value                  |      |      |      |      |      | ØD=8&10  | 6,000             | 7,000        |  |
| Shelf Life                                                | The following specifications shall be satisfied when the capacitors are restored to 20°C after leaving them under no load at 105°C for 1,000 hours.                                         |      |                                               |      |      |      |      |      |          |                   |              |  |
|                                                           | Capacitance Change                                                                                                                                                                          |      | ≤±20% of the initial value (6.3~10Vdc:≤±30%)  |      |      |      |      |      |          |                   |              |  |
|                                                           | Dissipation Factor                                                                                                                                                                          |      | ≤200% of the initial specified value          |      |      |      |      |      |          |                   |              |  |
|                                                           | Leakage Current                                                                                                                                                                             |      | ≤200% of the initial specified value          |      |      |      |      |      |          |                   |              |  |
|                                                           |                                                                                                                                                                                             |      |                                               |      |      |      |      |      |          |                   |              |  |

### DIMENSIONS[mm]



| ØD  | 5          | 6.3 | 8   | 10  | 12.5 | 13  | 16  | 18  |
|-----|------------|-----|-----|-----|------|-----|-----|-----|
| Ød  | 0.5        | 0.5 | 0.5 | 0.6 | 0.6  | 0.6 | 0.8 | 0.8 |
| F   | 2.0        | 2.5 | 3.5 | 5.0 | 5.0  | 5.0 | 7.5 | 7.5 |
| ØD' | ØD+0.5max. |     |     |     |      |     |     |     |
| L'  | L+2max.    |     |     |     |      |     |     |     |

### PART NUMBERING SYSTEM



### RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

| Freq.(Hz)      | 120  | 1k   | 10k  | 100k |
|----------------|------|------|------|------|
| Cap.(μF)       |      |      |      |      |
| Cap.<220       | 0.40 | 0.75 | 0.90 | 1.00 |
| 220≤Cap.<680   | 0.50 | 0.85 | 0.94 | 1.00 |
| 680≤Cap.<2200  | 0.60 | 0.87 | 0.95 | 1.00 |
| 2200≤Cap.<4700 | 0.75 | 0.90 | 0.95 | 1.00 |
| Cap.≥4700      | 0.85 | 0.95 | 0.98 | 1.00 |

# RS series

## STANDARD RATINGS

| WV (V <sub>dc</sub> ) | Cap (μF) | Size ΦDxL (mm) | Impedance (Ω <sub>max</sub> /20°C, 100kHz) | Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz) | Part Number      |
|-----------------------|----------|----------------|--------------------------------------------|---------------------------------------------------------|------------------|
| 6.3                   | 150      | 5×11           | 0.570                                      | 200                                                     | ERS0JM151D11---T |
|                       | 220      | 6.3×9          | 0.480                                      | 220                                                     | ERS0JM221E09---T |
|                       | 330      | 6.3×11         | 0.210                                      | 350                                                     | ERS0JM331E11---T |
|                       | 470      | 6.3×12         | 0.150                                      | 350                                                     | ERS0JM471E12---T |
|                       | 680      | 8×12           | 0.130                                      | 660                                                     | ERS0JM681F12---T |
|                       | 820      | 10×13          | 0.080                                      | 870                                                     | ERS0JM821G13---T |
|                       | 1000     | 8×16           | 0.086                                      | 850                                                     | ERS0JM102F16---T |
|                       | 1500     | 10×20          | 0.046                                      | 1400                                                    | ERS0JM152G20---T |
|                       | 1800     | 12.5×16        | 0.049                                      | 1450                                                    | ERS0JM182W16---T |
|                       | 2200     | 10×20          | 0.042                                      | 1650                                                    | ERS0JM222G20---T |
|                       | 3300     | 10×25          | 0.038                                      | 1800                                                    | ERS0JM332G25---T |
|                       | 3300     | 12.5×20        | 0.035                                      | 1910                                                    | ERS0JM332W20---T |
|                       | 3900     | 12.5×25        | 0.026                                      | 2230                                                    | ERS0JM392W25---T |
|                       | 4700     | 12.5×30        | 0.024                                      | 2650                                                    | ERS0JM472W30---T |
|                       | 5600     | 12.5×35        | 0.020                                      | 2880                                                    | ERS0JM562W35---T |
|                       | 5600     | 16×20          | 0.027                                      | 2530                                                    | ERS0JM562L20---T |
|                       | 6800     | 12.5×40        | 0.017                                      | 3350                                                    | ERS0JM682W40---T |
|                       | 6800     | 16×25          | 0.020                                      | 2930                                                    | ERS0JM682L25---T |
|                       | 6800     | 18×20          | 0.026                                      | 2860                                                    | ERS0JM682M20---T |
|                       | 8200     | 16×30          | 0.017                                      | 3450                                                    | ERS0JM822L30---T |
| 10                    | 10000    | 16×35          | 0.015                                      | 3610                                                    | ERS0JM103L35---T |
|                       | 10000    | 18×25          | 0.019                                      | 3140                                                    | ERS0JM103M25---T |
|                       | 12000    | 16×40          | 0.013                                      | 4100                                                    | ERS0JM123L40---T |
|                       | 12000    | 18×30          | 0.015                                      | 4170                                                    | ERS0JM123M30---T |
|                       | 15000    | 18×35          | 0.014                                      | 4220                                                    | ERS0JM153M35---T |
|                       | 18000    | 18×40          | 0.012                                      | 4300                                                    | ERS0JM183M40---T |
|                       | 100      | 5×11           | 0.570                                      | 200                                                     | ERS1AM101D11---T |
|                       | 220      | 6.3×11         | 0.210                                      | 350                                                     | ERS1AM221E11---T |
|                       | 330      | 6.3×12         | 0.190                                      | 400                                                     | ERS1AM331E12---T |
|                       | 470      | 8×12           | 0.130                                      | 660                                                     | ERS1AM471F12---T |
|                       | 680      | 8×16           | 0.086                                      | 850                                                     | ERS1AM681F16---T |
|                       | 680      | 10×13          | 0.080                                      | 870                                                     | ERS1AM681G13---T |
|                       | 1000     | 8×20           | 0.069                                      | 1050                                                    | ERS1AM102F20---T |
|                       | 1000     | 10×16          | 0.060                                      | 1230                                                    | ERS1AM102G16---T |
|                       | 1200     | 10×20          | 0.046                                      | 1400                                                    | ERS1AM122G20---T |
|                       | 1500     | 10×25          | 0.042                                      | 1650                                                    | ERS1AM152G25---T |
|                       | 1500     | 12.5×16        | 0.049                                      | 1450                                                    | ERS1AM152W16---T |
|                       | 2200     | 10×25          | 0.040                                      | 1640                                                    | ERS1AM222G25---T |
|                       | 2200     | 12.5×20        | 0.035                                      | 1910                                                    | ERS1AM222W20---T |
|                       | 2200     | 16×15          | 0.041                                      | 1950                                                    | ERS1AM222L15---T |
| 16                    | 3300     | 12.5×25        | 0.026                                      | 2230                                                    | ERS1AM332W25---T |
|                       | 3900     | 12.5×30        | 0.024                                      | 2650                                                    | ERS1AM392W30---T |
|                       | 3900     | 16×20          | 0.027                                      | 2530                                                    | ERS1AM392L20---T |
|                       | 4700     | 12.5×35        | 0.020                                      | 2880                                                    | ERS1AM472W35---T |
|                       | 5600     | 12.5×40        | 0.017                                      | 3350                                                    | ERS1AM562W40---T |
|                       | 5600     | 16×25          | 0.021                                      | 2930                                                    | ERS1AM562L25---T |
|                       | 5600     | 18×20          | 0.026                                      | 2860                                                    | ERS1AM562M20---T |
|                       | 6800     | 16×30          | 0.017                                      | 3450                                                    | ERS1AM682L30---T |
|                       | 6800     | 18×25          | 0.019                                      | 3140                                                    | ERS1AM682M25---T |
|                       | 8200     | 16×35          | 0.015                                      | 3610                                                    | ERS1AM822L35---T |
|                       | 8200     | 18×30          | 0.015                                      | 4170                                                    | ERS1AM822M30---T |
|                       | 10000    | 16×40          | 0.013                                      | 4100                                                    | ERS1AM103L40---T |
|                       | 10000    | 18×35          | 0.014                                      | 4220                                                    | ERS1AM103M35---T |
|                       | 12000    | 18×40          | 0.012                                      | 4300                                                    | ERS1AM123M40---T |
|                       | 56       | 5×11           | 0.570                                      | 200                                                     | ERS1CM560D11---T |
|                       | 100      | 5×11           | 0.550                                      | 272                                                     | ERS1CM101D11---T |
|                       | 120      | 6.3×11         | 0.210                                      | 350                                                     | ERS1CM121E11---T |
|                       | 220      | 6.3×11         | 0.140                                      | 450                                                     | ERS1CM221E11---T |
|                       | 330      | 8×12           | 0.130                                      | 660                                                     | ERS1CM331F12---T |
|                       | 470      | 8×12           | 0.130                                      | 800                                                     | ERS1CM471F12---T |

| WV (V <sub>dc</sub> ) | Cap (μF) | Size ΦDxL (mm) | Impedance (Ω <sub>max</sub> /20°C, 100kHz) | Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz) | Part Number      |
|-----------------------|----------|----------------|--------------------------------------------|---------------------------------------------------------|------------------|
| 16                    | 470      | 8×16           | 0.087                                      | 850                                                     | ERS1CM471F16---T |
|                       | 470      | 10×13          | 0.080                                      | 870                                                     | ERS1CM471G13---T |
|                       | 680      | 8×16           | 0.100                                      | 976                                                     | ERS1CM681F16---T |
|                       | 680      | 10×16          | 0.060                                      | 1230                                                    | ERS1CM681G16---T |
|                       | 1000     | 10×16          | 0.075                                      | 1269                                                    | ERS1CM102G16---T |
|                       | 1000     | 10×20          | 0.046                                      | 1400                                                    | ERS1CM102G20---T |
|                       | 1200     | 10×25          | 0.042                                      | 1650                                                    | ERS1CM122G25---T |
|                       | 1500     | 12.5×20        | 0.035                                      | 1910                                                    | ERS1CM152W20---T |
|                       | 2200     | 12.5×20        | 0.031                                      | 1720                                                    | ERS1CM222W20---T |
|                       | 3300     | 12.5×35        | 0.020                                      | 2880                                                    | ERS1CM332W35---T |
|                       | 3900     | 12.5×40        | 0.017                                      | 3350                                                    | ERS1CM392W40---T |
|                       | 3900     | 16×25          | 0.021                                      | 2930                                                    | ERS1CM392L25---T |
|                       | 3900     | 18×20          | 0.026                                      | 2860                                                    | ERS1CM392M20---T |
|                       | 4700     | 16×30          | 0.017                                      | 3450                                                    | ERS1CM472L30---T |
|                       | 4700     | 18×25          | 0.019                                      | 3140                                                    | ERS1CM472M25---T |
|                       | 5600     | 16×35          | 0.015                                      | 3610                                                    | ERS1CM562L35---T |
|                       | 5600     | 18×30          | 0.015                                      | 4170                                                    | ERS1CM562M30---T |
|                       | 6800     | 16×40          | 0.013                                      | 4100                                                    | ERS1CM682L40---T |
|                       | 8200     | 18×35          | 0.014                                      | 4220                                                    | ERS1CM822M35---T |
|                       | 10000    | 18×40          | 0.012                                      | 4300                                                    | ERS1CM103M40---T |
| 25                    | 47       | 5×11           | 0.570                                      | 200                                                     | ERS1EM470D11---T |
|                       | 47       | 6.3×9          | 0.740                                      | 180                                                     | ERS1EM470E09---T |
|                       | 100      | 6.3×11         | 0.210                                      | 350                                                     | ERS1EM101E11---T |
|                       | 220      | 8×12           | 0.130                                      | 660                                                     | ERS1EM221F12---T |
|                       | 330      | 8×12           | 0.100                                      | 700                                                     | ERS1EM331F12---T |
|                       | 330      | 8×16           | 0.086                                      | 850                                                     | ERS1EM331F16---T |
|                       | 330      | 10×13          | 0.080                                      | 870                                                     | ERS1EM331G13---T |
|                       | 470      | 8×16           | 0.075                                      | 950                                                     | ERS1EM471F16---T |
|                       | 470      | 8×20           | 0.069                                      | 1050                                                    | ERS1EM471F20---T |
|                       | 470      | 10×16          | 0.060                                      | 1230                                                    | ERS1EM471G16---T |
|                       | 680      | 10×20          | 0.046                                      | 1400                                                    | ERS1EM681G20---T |
|                       | 680      | 12.5×16        | 0.049                                      | 1450                                                    | ERS1EM681W16---T |
|                       | 820      | 10×25          | 0.042                                      | 1650                                                    | ERS1EM821G25---T |
|                       | 1000     | 10×30          | 0.030                                      | 1920                                                    | ERS1EM102G30---T |
|                       | 1000     | 12.5×20        | 0.035                                      | 1910                                                    | ERS1EM102W20---T |
|                       | 1500     | 12.5×25        | 0.026                                      | 2230                                                    | ERS1EM152W25---T |
|                       | 2200     | 12.5×25        | 0.030                                      | 2230                                                    | ERS1EM222W25---T |
|                       | 2200     | 18×20          | 0.026                                      | 2860                                                    | ERS1EM222M20---T |
|                       | 3300     | 16×30          | 0.017                                      | 3450                                                    | ERS1EM332L30---T |
|                       | 3300     | 18×25          | 0.019                                      | 3140                                                    | ERS1EM332M25---T |
| 35                    | 4700     | 16×40          | 0.013                                      | 4100                                                    | ERS1EM472L40---T |
|                       | 4700     | 18×35          | 0.014                                      | 4220                                                    | ERS1EM472M35---T |
|                       | 5600     | 18×40          | 0.012                                      | 4300                                                    | ERS1EM562M40---T |
|                       | 33       | 5×11           | 0.570                                      | 200                                                     | ERS1VM330D11---T |
|                       | 33       | 6.3×9          | 0.740                                      | 180                                                     | ERS1VM330E09---T |
|                       | 56       | 6.3×11         | 0.210                                      | 350                                                     | ERS1VM560E11---T |
|                       | 100      | 6.3×12         | 0.250                                      | 400                                                     | ERS1VM101E12---T |
|                       | 150      | 8×9            | 0.170                                      | 560                                                     | ERS1VM151F09---T |
|                       | 150      | 8×12           | 0.130                                      | 660                                                     | ERS1VM151F12---T |
|                       | 220      | 8×12           | 0.100                                      | 660                                                     | ERS1VM221F12---T |
|                       | 220      | 8×16           | 0.086                                      | 850                                                     | ERS1VM221F16---T |
|                       | 220      | 10×13          | 0.080                                      | 870                                                     | ERS1VM221G13---T |
|                       | 330      | 10×16          | 0.060                                      | 1230                                                    | ERS1VM331G16---T |
|                       | 470      | 10×20          | 0.046                                      | 1400                                                    | ERS1VM471G20---T |
|                       | 560      | 10×20          | 0.060                                      | 1400                                                    | ERS1VM561G20---T |
|                       | 560      | 10×25          | 0.042                                      | 1650                                                    | ERS1VM561G25---T |
|                       | 680      | 10×20          | 0.042                                      | 1700                                                    | ERS1VM681G20---T |
|                       | 680      | 12.5×20        | 0.035                                      | 1910                                                    | ERS1VM681W20---T |
|                       | 1000     | 12.5×20        | 0.030                                      | 2210                                                    | ERS1VM102W20---T |
|                       | 1200     | 12.5×25        | 0.032                                      | 2200                                                    | ERS1VM122W25---T |

# RS series

## ■ STANDARD RATINGS

| WV<br>(V <sub>dc</sub> ) | Cap<br>(μF) | Size<br>ΦDxL(mm) | Impedance<br>(Ω <sub>max</sub> /20°C,<br>100kHz) | Rated ripple<br>current<br>(mA <sub>RMS</sub> /105°C,<br>100kHz) | Part Number      |
|--------------------------|-------------|------------------|--------------------------------------------------|------------------------------------------------------------------|------------------|
| 35                       | 1200        | 16×20            | 0.028                                            | 2247                                                             | ERS1VM122L20---T |
|                          | 1500        | 12.5×25          | 0.032                                            | 2250                                                             | ERS1VM152W25---T |
|                          | 1500        | 13×20            | 0.035                                            | 2050                                                             | ERS1VM152K20---T |
|                          | 1800        | 16×20            | 0.030                                            | 2930                                                             | ERS1VM182L20---T |
|                          | 2200        | 16×25            | 0.030                                            | 2980                                                             | ERS1VM222L25---T |
|                          | 2200        | 16×30            | 0.017                                            | 3450                                                             | ERS1VM222L30---T |
|                          | 2200        | 18×25            | 0.019                                            | 3140                                                             | ERS1VM222M25---T |
|                          | 2700        | 16×25            | 0.030                                            | 3410                                                             | ERS1VM272L25---T |
|                          | 2700        | 16×35            | 0.015                                            | 3610                                                             | ERS1VM272L35---T |
|                          | 3300        | 16×40            | 0.012                                            | 4100                                                             | ERS1VM332L40---T |
|                          | 3300        | 18×35            | 0.014                                            | 4220                                                             | ERS1VM332M35---T |
|                          | 3900        | 18×40            | 0.011                                            | 4300                                                             | ERS1VM392M40---T |
| 50                       | 22          | 5×12             | 0.680                                            | 190                                                              | ERS1HM220D12---T |
|                          | 22          | 6.3×9            | 0.890                                            | 170                                                              | ERS1HM220E09---T |
|                          | 47          | 6.3×11           | 0.350                                            | 260                                                              | ERS1HM470E11---T |
|                          | 56          | 6.3×11           | 0.300                                            | 300                                                              | ERS1HM560E11---T |
|                          | 100         | 8×12             | 0.170                                            | 560                                                              | ERS1HM101F12---T |
|                          | 100         | 10×9             | 0.220                                            | 500                                                              | ERS1HM101G09---T |
|                          | 150         | 8×12             | 0.180                                            | 560                                                              | ERS1HM151F12---T |
|                          | 150         | 10×13            | 0.120                                            | 760                                                              | ERS1HM151G13---T |
|                          | 180         | 8×20             | 0.090                                            | 910                                                              | ERS1HM181F20---T |
|                          | 220         | 10×13            | 0.120                                            | 760                                                              | ERS1HM221G13---T |
|                          | 220         | 10×16            | 0.084                                            | 1050                                                             | ERS1HM221G16---T |
|                          | 270         | 10×13            | 0.150                                            | 650                                                              | ERS1HM271G13---T |
|                          | 330         | 10×16            | 0.065                                            | 1150                                                             | ERS1HM331G16---T |
|                          | 470         | 10×20            | 0.055                                            | 1500                                                             | ERS1HM471G20---T |
|                          | 470         | 12.5×20          | 0.045                                            | 1660                                                             | ERS1HM471W20---T |
|                          | 470         | 16×15            | 0.055                                            | 1690                                                             | ERS1HM471L15---T |
|                          | 560         | 12.5×16          | 0.060                                            | 1520                                                             | ERS1HM561W16---T |
|                          | 560         | 12.5×25          | 0.034                                            | 1960                                                             | ERS1HM561W25---T |
|                          | 680         | 12.5×20          | 0.045                                            | 1720                                                             | ERS1HM681W20---T |
|                          | 680         | 12.5×25          | 0.035                                            | 2022                                                             | ERS1HM681W25---T |
|                          | 820         | 12.5×20          | 0.045                                            | 1800                                                             | ERS1HM821W20---T |
|                          | 820         | 12.5×25          | 0.035                                            | 2030                                                             | ERS1HM821W25---T |
|                          | 820         | 16×20            | 0.034                                            | 2210                                                             | ERS1HM821L20---T |
|                          | 1000        | 12.5×25          | 0.035                                            | 2030                                                             | ERS1HM102W25---T |
|                          | 1000        | 16×25            | 0.025                                            | 2560                                                             | ERS1HM102L25---T |
|                          | 1200        | 16×25            | 0.032                                            | 2600                                                             | ERS1HM122L25---T |
|                          | 1200        | 18×20            | 0.036                                            | 2490                                                             | ERS1HM122M20---T |
|                          | 1500        | 18×25            | 0.028                                            | 2740                                                             | ERS1HM152M25---T |
|                          | 1800        | 16×40            | 0.016                                            | 3710                                                             | ERS1HM182L40---T |
|                          | 1800        | 18×30            | 0.021                                            | 3640                                                             | ERS1HM182M30---T |
|                          | 2200        | 18×35            | 0.017                                            | 3680                                                             | ERS1HM222M35---T |
|                          | 2700        | 18×40            | 0.014                                            | 3800                                                             | ERS1HM272M40---T |
| 63                       | 15          | 5×11             | 1.800                                            | 165                                                              | ERS1JM150D11---T |
|                          | 15          | 6.3×9            | 1.150                                            | 145                                                              | ERS1JM150E09---T |
|                          | 33          | 6.3×12           | 1.000                                            | 265                                                              | ERS1JM330E12---T |
|                          | 47          | 6.3×12           | 0.800                                            | 300                                                              | ERS1JM470E12---T |
|                          | 56          | 8×12             | 0.500                                            | 500                                                              | ERS1JM560F12---T |
|                          | 100         | 8×12             | 0.450                                            | 550                                                              | ERS1JM101F12---T |
|                          | 100         | 10×13            | 0.350                                            | 580                                                              | ERS1JM101G13---T |
|                          | 120         | 10×13            | 0.330                                            | 600                                                              | ERS1JM121G13---T |
|                          | 180         | 10×16            | 0.310                                            | 650                                                              | ERS1JM181G16---T |
|                          | 220         | 10×20            | 0.160                                            | 700                                                              | ERS1JM221G20---T |
|                          | 330         | 12.5×20          | 0.096                                            | 1500                                                             | ERS1JM331W20---T |
|                          | 390         | 12.5×25          | 0.090                                            | 1900                                                             | ERS1JM391W25---T |
|                          | 470         | 12.5×25          | 0.088                                            | 1950                                                             | ERS1JM471W25---T |
|                          | 470         | 16×20            | 0.080                                            | 2000                                                             | ERS1JM471L20---T |
|                          | 560         | 12.5×30          | 0.077                                            | 2060                                                             | ERS1JM561W30---T |
|                          | 680         | 12.5×30          | 0.077                                            | 2060                                                             | ERS1JM681W30---T |
|                          | 680         | 16×20            | 0.070                                            | 2150                                                             | ERS1JM681L20---T |

| WV<br>(V <sub>dc</sub> ) | Cap<br>(μF) | Size<br>ΦDxL(mm) | Impedance<br>(Ω <sub>max</sub> /20°C,<br>100kHz) | Rated ripple<br>current<br>(mA <sub>RMS</sub> /105°C,<br>100kHz) | Part Number      |
|--------------------------|-------------|------------------|--------------------------------------------------|------------------------------------------------------------------|------------------|
| 63                       | 820         | 18×20            | 0.065                                            | 2300                                                             | ERS1JM821M20---T |
|                          | 1000        | 18×25            | 0.042                                            | 2900                                                             | ERS1JM102M25---T |
|                          | 1200        | 16×40            | 0.028                                            | 3400                                                             | ERS1JM122L40---T |
|                          | 1200        | 18×30            | 0.036                                            | 3300                                                             | ERS1JM122M30---T |
|                          | 1500        | 18×35            | 0.032                                            | 3400                                                             | ERS1JM152M35---T |
|                          | 1800        | 18×40            | 0.030                                            | 3500                                                             | ERS1JM182M40---T |
|                          | 68          | 8×12             | 0.400                                            | 340                                                              | ERS1BM680F12---T |
|                          | 100         | 8×16             | 0.270                                            | 460                                                              | ERS1BM101F16---T |
| 80                       | 100         | 10×13            | 0.250                                            | 490                                                              | ERS1BM101G13---T |
|                          | 120         | 10×13            | 0.220                                            | 520                                                              | ERS1BM121G13---T |
|                          | 150         | 10×16            | 0.210                                            | 520                                                              | ERS1BM151G16---T |
|                          | 150         | 12.5×13          | 0.200                                            | 580                                                              | ERS1BM151W13---T |
|                          | 220         | 10×20            | 0.130                                            | 850                                                              | ERS1BM221G20---T |
|                          | 330         | 12.5×20          | 0.090                                            | 1150                                                             | ERS1BM331W20---T |
|                          | 330         | 12.5×25          | 0.090                                            | 1250                                                             | ERS1BM331W25---T |
|                          | 470         | 12.5×25          | 0.072                                            | 1300                                                             | ERS1BM471W25---T |
|                          | 470         | 16×20            | 0.070                                            | 1350                                                             | ERS1BM471L20---T |
|                          | 680         | 16×25            | 0.068                                            | 1600                                                             | ERS1BM681L25---T |
|                          | 820         | 18×25            | 0.060                                            | 1750                                                             | ERS1BM821M25---T |
|                          | 1000        | 16×40            | 0.050                                            | 2200                                                             | ERS1BM102L40---T |
|                          | 1000        | 18×35            | 0.050                                            | 2200                                                             | ERS1BM102M35---T |
|                          | 1200        | 18×40            | 0.040                                            | 2700                                                             | ERS1BM122M40---T |
|                          | 6.8         | 5×11             | 1.400                                            | 125                                                              | ERS1KM68D11---T  |
|                          | 10          | 6.3×11           | 1.200                                            | 140                                                              | ERS1KM100E11---T |
| 100                      | 22          | 6.3×12           | 0.900                                            | 150                                                              | ERS1KM220E12---T |
|                          | 22          | 8×12             | 0.900                                            | 197                                                              | ERS1KM220F12---T |
|                          | 27          | 8×12             | 0.630                                            | 260                                                              | ERS1KM270F12---T |
|                          | 47          | 8×12             | 0.560                                            | 300                                                              | ERS1KM470F12---T |
|                          | 47          | 10×13            | 0.340                                            | 480                                                              | ERS1KM470G13---T |
|                          | 68          | 8×16             | 0.310                                            | 500                                                              | ERS1KM680F16---T |
|                          | 68          | 10×13            | 0.320                                            | 490                                                              | ERS1KM680G13---T |
|                          | 82          | 10×13            | 0.280                                            | 525                                                              | ERS1KM820G13---T |
|                          | 82          | 10×16            | 0.180                                            | 550                                                              | ERS1KM820G16---T |
|                          | 100         | 10×16            | 0.180                                            | 550                                                              | ERS1KM101G16---T |
|                          | 100         | 10×20            | 0.170                                            | 560                                                              | ERS1KM101G20---T |
|                          | 120         | 12.5×16          | 0.160                                            | 700                                                              | ERS1KM121W16---T |
|                          | 150         | 10×20            | 0.160                                            | 700                                                              | ERS1KM151G20---T |
|                          | 150         | 12.5×20          | 0.140                                            | 895                                                              | ERS1KM151W20---T |
|                          | 220         | 12.5×25          | 0.080                                            | 1250                                                             | ERS1KM221W25---T |
|                          | 220         | 13×20            | 0.140                                            | 895                                                              | ERS1KM221K20---T |
|                          | 270         | 12.5×30          | 0.070                                            | 1500                                                             | ERS1KM271W30---T |
|                          | 330         | 12.5×30          | 0.070                                            | 1500                                                             | ERS1KM331W30---T |
|                          | 330         | 16×20            | 0.068                                            | 1550                                                             | ERS1KM331L20---T |
|                          | 470         | 16×25            | 0.050                                            | 1640                                                             | ERS1KM471L25---T |
|                          | 680         | 16×35            | 0.042                                            | 1850                                                             | ERS1KM681L35---T |
|                          | 820         | 18×30            | 0.032                                            | 2080                                                             | ERS1KM821M30---T |
| 120                      | 10          | 6.3×12           | 6.000                                            | 85                                                               | ERS2BM100E12---T |
|                          | 15          | 6.3×12           | 6.000                                            | 126                                                              | ERS2BM150E12---T |
|                          | 22          | 8×12             | 5.000                                            | 180                                                              | ERS2BM220F12---T |
|                          | 33          | 8×16             | 3.500                                            | 245                                                              | ERS2BM330F16---T |
|                          | 33          | 10×13            | 3.500                                            | 245                                                              | ERS2BM330G13---T |
|                          | 47          | 8×20             | 2.800                                            | 300                                                              | ERS2BM470F20---T |
|                          | 47          | 10×16            | 2.800                                            | 315                                                              | ERS2BM470G16---T |
|                          | 56          | 10×16            | 2.500                                            | 315                                                              | ERS2BM560G16---T |
|                          | 68          | 10×16            | 2.200                                            | 315                                                              | ERS2BM680G16---T |
|                          | 82          | 10×20            | 2.000                                            | 330                                                              | ERS2BM820G20---T |
|                          | 100         | 10×25            | 1.800                                            | 410                                                              | ERS2BM101G25---T |
|                          | 120         | 12.5×20          | 1.100                                            | 680                                                              | ERS2BM121W20---T |
|                          | 150         | 12.5×25          | 1.000                                            | 680                                                              | ERS2BM151W25---T |
|                          | 220         | 12.5×30          | 0.650                                            | 850                                                              | ERS2BM221W30---T |

# RS series

## ■ STANDARD RATINGS

| WV<br>(V <sub>dc</sub> ) | Cap<br>(μF) | Size<br>ΦD×L<br>(mm) | Impedance<br>(Ω <sub>max</sub> /20°C,<br>100kHz) | Rated ripple<br>current<br>(mA <sub>RMS</sub> /105°C,<br>100kHz) | Part Number      |
|--------------------------|-------------|----------------------|--------------------------------------------------|------------------------------------------------------------------|------------------|
| 120                      | 220         | 16×20                | 0.850                                            | 760                                                              | ERS2BM221L20---T |
|                          | 270         | 16×25                | 0.600                                            | 860                                                              | ERS2BM271L25---T |
|                          | 270         | 18×20                | 0.550                                            | 900                                                              | ERS2BM271M20---T |
|                          | 330         | 16×30                | 0.460                                            | 930                                                              | ERS2BM331L30---T |
|                          | 330         | 18×25                | 0.480                                            | 930                                                              | ERS2BM331M25---T |
|                          | 470         | 16×40                | 0.330                                            | 1035                                                             | ERS2BM471L40---T |
|                          | 470         | 18×30                | 0.330                                            | 1035                                                             | ERS2BM471M30---T |

※ Specifications subject to change without notice.