

## RJ series

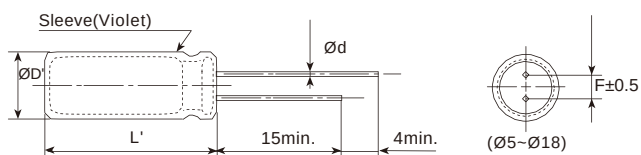
- Miniaturized
- Low impedance, high ripple current, long life
- Endurance: +105°C 8,000 ~12,000 hours
- RoHS Compliant



### SPECIFICATIONS

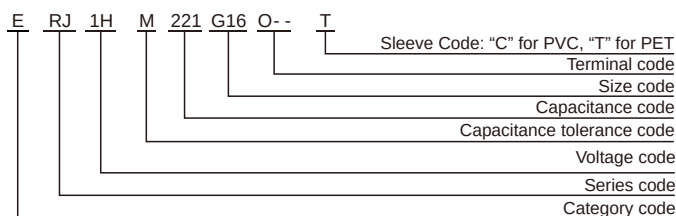
| Items                                                     | Characteristics                                                                                                                                                                                                                           |      |                                        |      |      |      |      |      |      |               |                   |            |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------------------------------|------|------|------|------|------|------|---------------|-------------------|------------|
| Category Temperature Range                                | -40~+105°C                                                                                                                                                                                                                                |      |                                        |      |      |      |      |      |      |               |                   |            |
| Rated Voltage Range                                       | 10~120 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> )                                                                                                                                                                                                           | 10   | 16                                     | 25   | 35   | 50   | 63   | 80   | 100  | 120           |                   |            |
|                                                           | tanδ (max.)                                                                                                                                                                                                                               | 0.19 | 0.16                                   | 0.14 | 0.12 | 0.10 | 0.09 | 0.09 | 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> )                                                                                                                                                                                                           | 10   | 16                                     | 25   | 35   | 50   | 63   | 80   | 100  | 120           |                   |            |
|                                                           | Z(-25°C)/Z(+20°C)                                                                                                                                                                                                                         | 2    | 2                                      |      |      |      |      |      |      |               | 3                 |            |
|                                                           | Z(-40°C)/Z(+20°C)                                                                                                                                                                                                                         | 4    | 3                                      |      |      |      |      |      |      |               | 6                 | (at 120Hz) |
| Endurance                                                 | The specifications listed below shall be met 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,the peak voltage shall not exceed the rated voltage. |      |                                        |      |      |      |      |      |      |               |                   |            |
|                                                           | Capacitance Change                                                                                                                                                                                                                        |      | ≤±25% of the initial value (10V:≤±30%) |      |      |      |      |      |      | Case Dia.(mm) | Load life (hours) |            |
|                                                           | D.F. (tanδ)                                                                                                                                                                                                                               |      | ≤200% of the initial specified value   |      |      |      |      |      |      | ØD≤6.3        | 10~120V<br>8,000  |            |
|                                                           | Leakage Current                                                                                                                                                                                                                           |      | ≤The initial specified value           |      |      |      |      |      |      | ØD=8&10       | 10,000            |            |
|                                                           |                                                                                                                                                                                                                                           |      |                                        |      |      |      |      |      |      | ØD≥12.5       | 12,000            |            |
| 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                                                                                                                                                                                                                        |      | ≤±25% of the initial value (10V:≤±30%) |      |      |      |      |      |      |               |                   |            |
|                                                           | D.F. (tanδ)                                                                                                                                                                                                                               |      | ≤200% of the initial specified value   |      |      |      |      |      |      |               |                   |            |
|                                                           | Leakage Current                                                                                                                                                                                                                           |      | ≤200% of the initial specified value   |      |      |      |      |      |      |               |                   |            |

### DIMENSIONS[mm]



| ØD  | 5          | 6.3 | 8   | 10  | 12.5 | 16  | 18  |
|-----|------------|-----|-----|-----|------|-----|-----|
| Ød  | 0.5        | 0.5 | 0.5 | 0.6 | 0.6  | 0.8 | 0.8 |
| F   | 2.0        | 2.5 | 3.5 | 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)<br>Cap.(μF) | 120  | 1k   | 10k  | 100k≤ |
|-----------------------|------|------|------|-------|
| Cap.<47               | 0.42 | 0.70 | 0.90 | 1.00  |
| 47≤Cap.<330           | 0.50 | 0.73 | 0.92 | 1.00  |
| 330≤Cap.<820          | 0.55 | 0.77 | 0.94 | 1.00  |
| 820≤Cap.<2200         | 0.60 | 0.80 | 0.96 | 1.00  |
| Cap.≥2200             | 0.70 | 0.85 | 0.98 | 1.00  |

# RJ series

## ■ STANDARD RATINGS

| WV (V <sub>dc</sub> ) | Cap (μF) | Size ΦDxL(mm) | tanδ | Impedance (Ω <sub>max</sub> /20°C, 100kHz) | Rated ripple current (mA <sub>RMS</sub> /105°C, 100kHz) | Part Number    |
|-----------------------|----------|---------------|------|--------------------------------------------|---------------------------------------------------------|----------------|
| 10(1A)                | 150      | 5×11          | 0.19 | 0.4                                        | 450                                                     | ERJ1AM151D11OT |
|                       |          | 6.3×9         | 0.19 | 0.52                                       | 380                                                     | ERJ1AM151E09OT |
|                       | 330      | 6.3×11        | 0.19 | 0.17                                       | 700                                                     | ERJ1AM331E11OT |
|                       |          | 8×9           | 0.19 | 0.22                                       | 590                                                     | ERJ1AM332F09OT |
|                       | 560      | 8×12          | 0.19 | 0.075                                      | 1200                                                    | ERJ1AM561F12OT |
|                       |          | 10×9          | 0.19 | 0.097                                      | 1020                                                    | ERJ1AM561G09OT |
|                       | 680      | 8×16          | 0.19 | 0.059                                      | 1600                                                    | ERJ1AM681F16OT |
|                       | 820      | 10×12.5       | 0.19 | 0.053                                      | 1700                                                    | ERJ1AM821G1BOT |
|                       | 1000     | 8×20          | 0.19 | 0.041                                      | 1960                                                    | ERJ1AM102F20OT |
|                       | 1200     | 10×16         | 0.19 | 0.038                                      | 2000                                                    | ERJ1AM122G16OT |
|                       | 1800     | 10×20         | 0.19 | 0.028                                      | 2500                                                    | ERJ1AM182G20OT |
|                       | 2200     | 10×25         | 0.21 | 0.024                                      | 2900                                                    | ERJ1AM222G25OT |
|                       | 2700     | 12.5×20       | 0.21 | 0.025                                      | 2600                                                    | ERJ1AM272W20OT |
|                       | 3300     | 12.5×25       | 0.23 | 0.019                                      | 3200                                                    | ERJ1AM332W25OT |
|                       | 4700     | 12.5×30       | 0.25 | 0.018                                      | 3660                                                    | ERJ1AM472W30OT |
|                       |          | 16×20         | 0.25 | 0.021                                      | 3330                                                    | ERJ1AM472L20OT |
|                       | 5600     | 12.5×35       | 0.27 | 0.016                                      | 4120                                                    | ERJ1AM562W35OT |
|                       |          | 16×25         | 0.27 | 0.017                                      | 3810                                                    | ERJ1AM562L25OT |
| 16(1C)                | 120      | 5×11          | 0.16 | 0.4                                        | 450                                                     | ERJ1CM121D11OT |
|                       |          | 6.3×9         | 0.16 | 0.52                                       | 380                                                     | ERJ1CM121E09OT |
|                       | 270      | 6.3×11        | 0.16 | 0.17                                       | 700                                                     | ERJ1CM271E11OT |
|                       |          | 8×9           | 0.16 | 0.22                                       | 590                                                     | ERJ1CM271F09OT |
|                       | 470      | 8×12          | 0.16 | 0.075                                      | 1200                                                    | ERJ1CM471F12OT |
|                       |          | 10×9          | 0.16 | 0.097                                      | 1020                                                    | ERJ1CM471G09OT |
|                       | 560      | 8×16          | 0.16 | 0.059                                      | 1600                                                    | ERJ1CM561F16OT |
|                       | 680      | 10×12.5       | 0.16 | 0.053                                      | 1700                                                    | ERJ1CM681G1BOT |
|                       | 820      | 8×20          | 0.16 | 0.041                                      | 1960                                                    | ERJ1CM821F20OT |
|                       | 1000     | 10×16         | 0.16 | 0.038                                      | 2000                                                    | ERJ1CM102G16OT |
|                       | 1500     | 10×20         | 0.16 | 0.028                                      | 2500                                                    | ERJ1CM152G20OT |
|                       | 1800     | 10×25         | 0.16 | 0.024                                      | 2900                                                    | ERJ1CM182G25OT |
|                       | 2200     | 12.5×20       | 0.18 | 0.025                                      | 2600                                                    | ERJ1CM222W20OT |
|                       | 2700     | 12.5×25       | 0.18 | 0.019                                      | 3200                                                    | ERJ1CM272W25OT |
|                       | 3300     | 12.5×30       | 0.20 | 0.018                                      | 3660                                                    | ERJ1CM332W30OT |
|                       |          | 16×20         | 0.20 | 0.021                                      | 3330                                                    | ERJ1CM332L20OT |
|                       | 3900     | 12.5×35       | 0.20 | 0.016                                      | 4120                                                    | ERJ1CM392W35OT |
|                       | 4700     | 16×25         | 0.22 | 0.017                                      | 3810                                                    | ERJ1CM472L25OT |
| 25(1E)                | 68       | 5×11          | 0.14 | 0.4                                        | 450                                                     | ERJ1EM680D11OT |
|                       |          | 6.3×9         | 0.14 | 0.52                                       | 380                                                     | ERJ1EM680E09OT |
|                       | 150      | 6.3×11        | 0.14 | 0.17                                       | 700                                                     | ERJ1EM151E11OT |
|                       |          | 8×9           | 0.14 | 0.22                                       | 590                                                     | ERJ1EM151F09OT |
|                       | 330      | 8×12          | 0.14 | 0.075                                      | 1200                                                    | ERJ1EM331F12OT |
|                       |          | 10×9          | 0.14 | 0.097                                      | 1020                                                    | ERJ1EM331G09OT |
|                       | 390      | 8×16          | 0.14 | 0.059                                      | 1600                                                    | ERJ1EM391F16OT |
|                       | 470      | 10×12.5       | 0.14 | 0.053                                      | 1700                                                    | ERJ1EM471G1BOT |
|                       | 560      | 8×20          | 0.14 | 0.041                                      | 1960                                                    | ERJ1EM561F20OT |
|                       | 680      | 10×16         | 0.14 | 0.038                                      | 2000                                                    | ERJ1EM681G16OT |
|                       | 1000     | 10×20         | 0.14 | 0.028                                      | 2500                                                    | ERJ1EM102G20OT |
|                       | 1200     | 10×25         | 0.14 | 0.024                                      | 2900                                                    | ERJ1EM122G25OT |
|                       | 1500     | 12.5×20       | 0.14 | 0.025                                      | 2600                                                    | ERJ1EM152W20OT |
|                       | 1800     | 12.5×25       | 0.14 | 0.019                                      | 3200                                                    | ERJ1EM182W25OT |
|                       | 2200     | 12.5×30       | 0.16 | 0.018                                      | 3660                                                    | ERJ1EM222W30OT |
|                       |          | 16×20         | 0.16 | 0.021                                      | 3330                                                    | ERJ1EM222L20OT |
|                       | 2700     | 12.5×35       | 0.16 | 0.016                                      | 4120                                                    | ERJ1EM272W35OT |
|                       | 3300     | 16×25         | 0.18 | 0.017                                      | 3810                                                    | ERJ1EM332L25OT |
| 35(1V)                | 47       | 5×11          | 0.12 | 0.4                                        | 450                                                     | ERJ1VM470D11OT |
|                       |          | 6.3×9         | 0.12 | 0.52                                       | 380                                                     | ERJ1VM470E09OT |
|                       | 100      | 6.3×11        | 0.12 | 0.17                                       | 700                                                     | ERJ1VM101E11OT |
|                       |          | 8×9           | 0.12 | 0.22                                       | 590                                                     | ERJ1VM101F09OT |
|                       | 180      | 8×12          | 0.12 | 0.075                                      | 1200                                                    | ERJ1VM181F12OT |
|                       |          | 10×9          | 0.12 | 0.097                                      | 1020                                                    | ERJ1VM181G09OT |
|                       | 220      | 8×16          | 0.12 | 0.059                                      | 1600                                                    | ERJ1VM221F16OT |
|                       | 270      | 10×12.5       | 0.12 | 0.053                                      | 1700                                                    | ERJ1VM271G1BOT |
|                       | 330      | 8×20          | 0.12 | 0.041                                      | 1960                                                    | ERJ1VM331F20OT |
|                       | 390      | 10×16         | 0.12 | 0.038                                      | 2000                                                    | ERJ1VM391G16OT |
|                       | 560      | 10×20         | 0.12 | 0.028                                      | 2500                                                    | ERJ1VM561G20OT |
|                       | 680      | 10×25         | 0.12 | 0.024                                      | 2900                                                    | ERJ1VM681G25OT |
|                       | 820      | 12.5×20       | 0.12 | 0.025                                      | 2600                                                    | ERJ1VM821W20OT |
|                       | 1200     | 12.5×25       | 0.12 | 0.019                                      | 3200                                                    | ERJ1VM122W25OT |

| WV (V <sub>dc</sub> ) | Cap (μF) | Size ΦDxL(mm) | tanδ | Impedance (Ω <sub>max</sub> /20°C, 100kHz) | Rated ripple current (mA <sub>RMS</sub> /105°C, 100kHz) | Part Number    |
|-----------------------|----------|---------------|------|--------------------------------------------|---------------------------------------------------------|----------------|
| 35(1V)                | 1500     | 12.5×30       | 0.12 | 0.018                                      | 3660                                                    | ERJ1VM152W30OT |
|                       |          | 16×20         | 0.12 | 0.021                                      | 3330                                                    | ERJ1VM152L20OT |
|                       | 1800     | 12.5×35       | 0.12 | 0.016                                      | 4120                                                    | ERJ1VM182W35OT |
|                       |          | 16×25         | 0.12 | 0.017                                      | 3810                                                    | ERJ1VM182L25OT |
| 50(1H)                | 27       | 5×11          | 0.10 | 0.48                                       | 310                                                     | ERJ1HM270D11OT |
|                       |          | 6.3×9         | 0.10 | 0.63                                       | 260                                                     | ERJ1HM270E09OT |
|                       | 56       | 6.3×11        | 0.10 | 0.22                                       | 500                                                     | ERJ1HM560E11OT |
|                       |          | 8×9           | 0.10 | 0.29                                       | 425                                                     | ERJ1HM560F09OT |
|                       | 100      | 8×12          | 0.10 | 0.12                                       | 950                                                     | ERJ1HM101F12OT |
|                       |          | 10×9          | 0.10 | 0.16                                       | 800                                                     | ERJ1HM101G09OT |
|                       | 120      | 8×16          | 0.10 | 0.082                                      | 1230                                                    | ERJ1HM121F16OT |
|                       | 150      | 10×12.5       | 0.10 | 0.073                                      | 1280                                                    | ERJ1HM151G1BOT |
|                       | 180      | 8×20          | 0.10 | 0.058                                      | 1580                                                    | ERJ1HM181F20OT |
|                       | 220      | 10×16         | 0.10 | 0.053                                      | 1650                                                    | ERJ1HM221G16OT |
|                       | 330      | 10×20         | 0.10 | 0.038                                      | 2060                                                    | ERJ1HM331G20OT |
|                       | 390      | 10×25         | 0.10 | 0.032                                      | 2420                                                    | ERJ1HM391G25OT |
|                       | 470      | 12.5×20       | 0.10 | 0.032                                      | 2300                                                    | ERJ1HM471W20OT |
|                       | 680      | 12.5×25       | 0.10 | 0.025                                      | 2800                                                    | ERJ1HM681W25OT |
|                       |          | 12.5×30       | 0.10 | 0.023                                      | 3370                                                    | ERJ1HM821W30OT |
|                       | 820      | 16×20         | 0.10 | 0.026                                      | 3070                                                    | ERJ1HM821L20OT |
|                       |          | 12.5×35       | 0.10 | 0.021                                      | 3810                                                    | ERJ1HM102W35OT |
| 63(1J)                | 18       | 5×11          | 0.09 | 0.71                                       | 240                                                     | ERJ1JM180D11OT |
|                       |          | 6.3×9         | 0.09 | 0.92                                       | 200                                                     | ERJ1JM180E09OT |
|                       | 47       | 6.3×11        | 0.09 | 0.28                                       | 420                                                     | ERJ1JM470E11OT |
|                       |          | 8×9           | 0.09 | 0.36                                       | 350                                                     | ERJ1JM470F09OT |
|                       | 82       | 8×12          | 0.09 | 0.18                                       | 720                                                     | ERJ1JM820F12OT |
|                       |          | 10×9          | 0.09 | 0.24                                       | 610                                                     | ERJ1JM820G09OT |
|                       | 100      | 8×16          | 0.09 | 0.13                                       | 990                                                     | ERJ1JM101F16OT |
|                       | 120      | 10×12.5       | 0.09 | 0.11                                       | 990                                                     | ERJ1JM121G1BOT |
|                       | 150      | 8×20          | 0.09 | 0.096                                      | 1200                                                    | ERJ1JM151F20OT |
|                       | 180      | 10×16         | 0.09 | 0.076                                      | 1200                                                    | ERJ1JM181G16OT |
|                       | 270      | 10×20         | 0.09 | 0.056                                      | 1570                                                    | ERJ1JM271G20OT |
|                       |          | 12.5×16       | 0.09 | 0.072                                      | 1570                                                    | ERJ1JM271W16OT |
|                       | 330      | 10×25         | 0.09 | 0.046                                      | 1990                                                    | ERJ1JM331G25OT |
|                       | 390      | 12.5×20       | 0.09 | 0.041                                      | 1990                                                    | ERJ1JM391W20OT |
|                       | 470      | 12.5×25       | 0.09 | 0.031                                      | 2460                                                    | ERJ1JM471W25OT |
|                       | 560      | 12.5×30       | 0.09 | 0.028                                      | 2760                                                    | ERJ1JM561W30OT |
|                       |          | 16×20         | 0.09 | 0.032                                      | 2380                                                    | ERJ1JM561L20OT |
|                       | 680      | 12.5×35       | 0.09 | 0.024                                      | 3040                                                    | ERJ1JM681W35OT |
| 80(1B)                | 12       | 5×11          | 0.09 | 1.2                                        | 220                                                     | ERJ1BM120D11OT |
|                       |          | 6.3×9         | 0.09 | 1.6                                        | 180                                                     | ERJ1BM120E09OT |
|                       | 27       | 6.3×11        | 0.09 | 0.46                                       | 370                                                     | ERJ1BM270E11OT |
|                       |          | 8×9           | 0.09 | 0.6                                        | 310                                                     | ERJ1BM270F09OT |
|                       | 47       | 8×12          | 0.09 | 0.29                                       | 620                                                     | ERJ1BM470F12OT |
|                       |          | 10×9          | 0.09 | 0.38                                       | 520                                                     | ERJ1BM470G09OT |
|                       | 56       | 8×16          | 0.09 | 0.2                                        | 780                                                     | ERJ1BM560F16OT |
|                       | 68       | 10×12.5       | 0.09 | 0.17                                       | 780                                                     | ERJ1BM680G1BOT |
|                       | 82       | 8×20          | 0.09 | 0.16                                       | 1040                                                    | ERJ1BM820F20OT |
|                       | 100      | 10×16         | 0.09 | 0.11                                       | 1040                                                    | ERJ1BM101G16OT |
|                       | 150      | 10×20         | 0.09 | 0.084                                      | 1430                                                    | ERJ1BM151G20OT |
|                       |          | 12.5×16       | 0.09 | 0.11                                       | 1430                                                    | ERJ1BM151W16OT |
|                       | 180      | 10×25         | 0.09 | 0.069                                      | 1620                                                    | ERJ1BM181G25OT |
|                       | 220      | 12.5×20       | 0.09 | 0.062                                      | 1750                                                    | ERJ1BM221W20OT |
|                       | 270      | 12.5×25       | 0.09 | 0.047                                      | 2210                                                    | ERJ1BM271W25OT |
|                       | 330      | 12.5×30       | 0.09 | 0.042                                      | 2400                                                    | ERJ1BM331W30OT |
|                       |          | 16×20         | 0.09 | 0.048                                      | 1950                                                    | ERJ1BM331L20OT |
|                       | 390      | 12.5×35       | 0.09 | 0.036                                      | 2600                                                    | ERJ1BM391W35OT |

# RJ series

## ■ STANDARD RATINGS

| WV<br>(V <sub>dc</sub> ) | Cap<br>(μF) | Size<br>ΦDxL(mm) | tanδ    | 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    |
|--------------------------|-------------|------------------|---------|--------------------------------------------------|------------------------------------------------------------------|----------------|
| 100(1K)                  | 8.2         | 5×11             | 0.08    | 1.2                                              | 220                                                              | ERJ1KM8R2D11OT |
|                          |             | 6.3×9            | 0.08    | 1.6                                              | 180                                                              | ERJ1KM8R2E09OT |
|                          | 18          | 6.3×11           | 0.08    | 0.46                                             | 370                                                              | ERJ1KM180E11OT |
|                          |             | 8×9              | 0.08    | 0.6                                              | 310                                                              | ERJ1KM180F09OT |
|                          | 33          | 8×12             | 0.08    | 0.29                                             | 620                                                              | ERJ1KM330F12OT |
|                          |             | 10×9             | 0.08    | 0.38                                             | 520                                                              | ERJ1KM330G09OT |
|                          | 47          | 8×16             | 0.08    | 0.2                                              | 780                                                              | ERJ1KM470F16OT |
|                          | 56          | 10×12.5          | 0.08    | 0.17                                             | 780                                                              | ERJ1KM560G1BOT |
|                          | 68          | 8×20             | 0.08    | 0.16                                             | 1040                                                             | ERJ1KM680F20OT |
|                          | 82          | 10×16            | 0.08    | 0.11                                             | 1040                                                             | ERJ1KM820G16OT |
|                          | 100         | 10×20            | 0.08    | 0.084                                            | 1430                                                             | ERJ1KM101G20OT |
|                          |             | 12.5×16          | 0.08    | 0.11                                             | 1430                                                             | ERJ1KM101W16OT |
|                          | 120         | 10×25            | 0.08    | 0.069                                            | 1620                                                             | ERJ1KM121G25OT |
|                          | 150         | 12.5×20          | 0.08    | 0.062                                            | 1750                                                             | ERJ1KM151W20OT |
|                          | 220         | 12.5×25          | 0.08    | 0.047                                            | 2210                                                             | ERJ1KM221W25OT |
|                          | 270         | 12.5×30          | 0.08    | 0.042                                            | 2400                                                             | ERJ1KM271W30OT |
|                          |             | 16×20            | 0.08    | 0.048                                            | 1950                                                             | ERJ1KM271L20OT |
|                          | 330         | 12.5×35          | 0.08    | 0.036                                            | 2600                                                             | ERJ1KM331W35OT |
|                          |             | 12.5×40          | 0.08    | 0.032                                            | 2860                                                             | ERJ1KM391W40OT |
|                          | 390         | 16×25            | 0.08    | 0.038                                            | 2430                                                             | ERJ1KM391L25OT |
|                          |             | 18×20            | 0.08    | 0.045                                            | 2270                                                             | ERJ1KM391M20OT |
|                          | 470         | 16×30            | 0.08    | 0.032                                            | 2640                                                             | ERJ1KM471L30OT |
|                          |             | 18×25            | 0.08    | 0.036                                            | 2500                                                             | ERJ1KM471M25OT |
|                          | 560         | 16×35            | 0.08    | 0.029                                            | 2860                                                             | ERJ1KM561L35OT |
|                          |             | 18×30            | 0.08    | 0.03                                             | 2860                                                             | ERJ1KM561M30OT |
|                          | 680         | 16×40            | 0.08    | 0.027                                            | 3510                                                             | ERJ1KM681L40OT |
|                          |             | 18×35            | 0.08    | 0.027                                            | 3510                                                             | ERJ1KM681M35OT |
|                          | 820         | 18×40            | 0.08    | 0.026                                            | 3860                                                             | ERJ1KM821M40OT |
| 120(2B)                  | 10          | 6.3×11           | 0.12    | 4.6                                              | 110                                                              | ERJ2BM100E11OT |
|                          | 15          | 6.3×12           | 0.12    | 3.8                                              | 145                                                              | ERJ2BM150E12OT |
|                          | 18          | 8×9              | 0.12    | 3.5                                              | 165                                                              | ERJ2BM180F09OT |
|                          | 22          | 8×12             | 0.12    | 3.0                                              | 180                                                              | ERJ2BM220F12OT |
|                          |             | 8×16             | 0.12    | 2.5                                              | 320                                                              | ERJ2BM330F16OT |
|                          | 33          | 10×12.5          | 0.12    | 2.5                                              | 320                                                              | ERJ2BM330G1BOT |
|                          |             | 8×20             | 0.12    | 2.2                                              | 385                                                              | ERJ2BM470F20OT |
|                          | 47          | 10×16            | 0.12    | 2.0                                              | 400                                                              | ERJ2BM470G16OT |
|                          |             | 56               | 10×16   | 0.12                                             | 1.9                                                              | 410            |
|                          | 68          | 10×16            | 0.12    | 1.8                                              | 420                                                              | ERJ2BM680G16OT |
|                          | 82          | 10×20            | 0.12    | 1.6                                              | 435                                                              | ERJ2BM820G20OT |
|                          | 100         | 10×25            | 0.12    | 1.3                                              | 540                                                              | ERJ2BM101G25OT |
|                          |             | 120              | 12.5×20 | 0.12                                             | 1.1                                                              | 750            |
|                          | 150         | 12.5×25          | 0.12    | 0.85                                             | 810                                                              | ERJ2BM151W25OT |
|                          |             | 13×30            | 0.12    | 0.65                                             | 990                                                              | ERJ2BM221K30OT |
|                          | 220         | 16×20            | 0.12    | 0.65                                             | 990                                                              | ERJ2BM221L20OT |
|                          |             | 16×25            | 0.12    | 0.47                                             | 1125                                                             | ERJ2BM271L25OT |
|                          | 270         | 18×20            | 0.12    | 0.47                                             | 1125                                                             | ERJ2BM271M20OT |
|                          |             | 16×30            | 0.12    | 0.36                                             | 1215                                                             | ERJ2BM331L30OT |
|                          | 330         | 18×25            | 0.12    | 0.36                                             | 1215                                                             | ERJ2BM331M25OT |
|                          |             | 16×40            | 0.12    | 0.26                                             | 1350                                                             | ERJ2BM471L40OT |
|                          | 470         | 18×30            | 0.12    | 0.26                                             | 1350                                                             | ERJ2BM471M30OT |