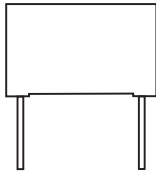
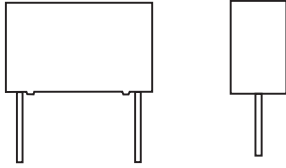
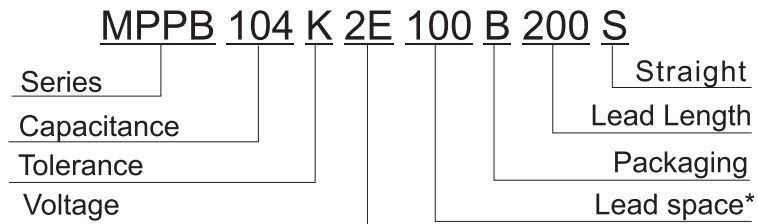


■ FEATURES

- Low loss at high frequency
- Rated voltage : 160Vdc~2000Vdc (90Vac~700Vac)
- Capacitance range : 0.00056 ~ 15 μ F
- Plastic case (Compliant to UL 94V-0), epoxy resom sealing
- RoHS Compliant and lead-free terminations
- Widely used in high frequency, DC, AC and pulse circuits



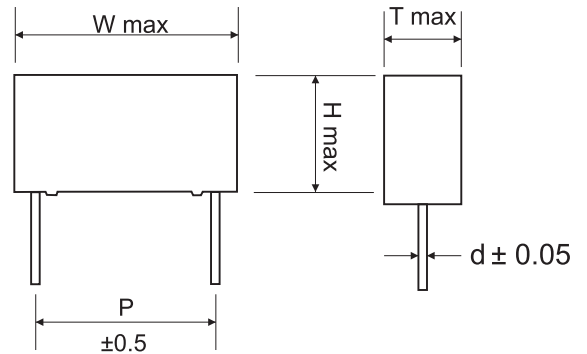
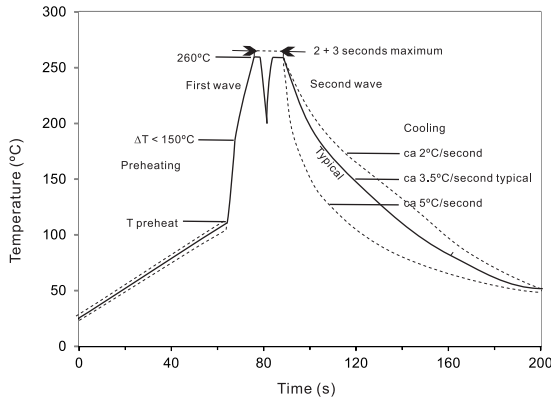
■ PART NUMBER EXAMPLE



■ ELECTRICAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

| Items | Performance | | | | | | | |
|--|---|---|---------|----------|----------|----------|----------|----------|
| Operating Voltage Range | 160Vdc ~ 2,000Vdc (90Vac ~ 700Vac) | | | | | | | |
| Rated Temperature | -55°C ~ +105°C (Derates over 85°C : 125% per °C of Rated Voltage) | | | | | | | |
| Usable Upper Category Temperature | +105°C (Derates over +85°C : 125% per °C of Rated Voltage) | | | | | | | |
| Climatic Category | 55 / 105 / 56 | | | | | | | |
| Capacitance Range | 0.00056 μ F ~ 15 μ F | | | | | | | |
| Capacitance Tolerance | 5% (J), 10% (K), other tolerances on request | | | | | | | |
| Voltage Proof | 1.6 U _R (5s) | | | | | | | |
| Dissipation Factor | $\leq 10 \times 10^{-4}$ (1KHz, 20°C) | | | | | | | |
| Insulation Resistance | R \geq 100,000M Ω , CN \leq 0.33 μ F (20°C, 100V, 1min) RCN \geq 30,000s, CN > 0.33 μ F | | | | | | | |
| Maximum Pulse Rise Time (dV/dt) If the working voltage (V) is lower than the rated voltage (V _R), the capacitor can be worked at a higher dV/dt. In this case, the maximum allowed dV/dt is obtained by multiplying the right value with V _R /V. | Voltage (Vdc) | max. pulse rise time, dV/dt (V/ μ Sec), T _a < 25°C | | | | | | |
| | | P = 5.0 | P = 7.5 | P = 10.0 | P = 15.0 | P = 22.5 | P = 27.5 | P = 37.5 |
| | 160 | 110 | 310 | 190 | 110 | 65 | 55 | --- |
| | 250 | 270 | 660 | 560 | 310 | 130 | 110 | --- |
| | 400 | 440 | 900 | 1,500 | 900 | 500 | 300 | 100 |
| | 630 | 550 | 1,500 | 3,000 | 2,500 | 1,500 | 900 | --- |
| | 1,000 | --- | --- | 4,800 | 3,200 | 2,100 | 1,000 | --- |
| | 1,600 | --- | --- | --- | 6,000 | 3,000 | 2,000 | --- |
| 2,000 | --- | --- | --- | 9,500 | 3,500 | 2,300 | --- | |

WAVE SOLDERING RECOMMENDATIONS



RATINGS & DIMENSIONS (mm)

| μF | Working Voltage | 160Vdc (2C) | | | | |
|-------|-----------------|-------------|------|-----|------|-----|
| | | 90Vac | | | | |
| | Code | W | H | T | P | d |
| 0.027 | 273 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| 0.033 | 333 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| 0.039 | 393 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| 0.047 | 473 | 7.2 | 9.5 | 4.5 | 5.0 | 0.5 |
| 0.056 | 563 | 7.2 | 9.5 | 4.5 | 5.0 | 0.5 |
| 0.068 | 683 | 7.2 | 9.5 | 4.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| 0.082 | 823 | 7.2 | 10.0 | 5.0 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.1 | 104 | 7.2 | 10.0 | 5.0 | 5.0 | 0.5 |
| | | 10.5 | 11.0 | 5.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.12 | 124 | 7.2 | 11.0 | 6.0 | 5.0 | 0.5 |
| | | 10.5 | 11.0 | 5.0 | 7.5 | 0.6 |
| | | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 |
| 0.15 | 154 | 7.2 | 11.0 | 6.0 | 5.0 | 0.5 |
| | | 10.5 | 12.0 | 6.0 | 7.5 | 0.6 |
| | | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 |
| 0.18 | 184 | 10.5 | 12.0 | 6.0 | 7.5 | 0.6 |
| | | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.22 | 224 | 13.0 | 12.0 | 6.0 | 10.0 | 0.6 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.27 | 274 | 13.0 | 12.0 | 6.0 | 10.0 | 0.6 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.33 | 334 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.39 | 394 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 |
| 0.47 | 474 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.56 | 564 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |

| μF | Working Voltage | 160Vdc (2C) | | | | |
|------|-----------------|-------------|------|------|------|-----|
| | | 90Vac | | | | |
| | Code | W | H | T | P | d |
| 0.68 | 684 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.82 | 824 | 17.5 | 14.5 | 8.5 | 15.0 | 0.8 |
| | | 26.5 | 16.0 | 7.0 | 22.5 | 0.8 |
| 1 | 105 | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 |
| | | 26.5 | 16.0 | 7.0 | 22.5 | 0.8 |
| | | 32.0 | 18.0 | 9.0 | 27.5 | 0.8 |
| 1.2 | 125 | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 |
| | | 26.5 | 17.0 | 8.5 | 22.5 | 0.8 |
| | | 32.0 | 18.0 | 9.0 | 27.5 | 0.8 |
| 1.5 | 155 | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 |
| | | 26.5 | 17.0 | 8.5 | 22.5 | 0.8 |
| | | 32.0 | 18.0 | 9.0 | 27.5 | 0.8 |
| 1.8 | 185 | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 |
| | | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 |
| | | 32.0 | 18.0 | 9.5 | 27.5 | 0.8 |
| 2.2 | 225 | 26.5 | 20.0 | 11.0 | 22.5 | 0.8 |
| | | 32.0 | 18.0 | 9.0 | 27.5 | 0.8 |
| 2.5 | 255 | 26.5 | 20.0 | 11.0 | 22.5 | 0.8 |
| 2.7 | 275 | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 |
| | | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 |
| 3.3 | 335 | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 |
| | | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 |
| 3.9 | 395 | 32.0 | 22.0 | 13.0 | 27.5 | 0.8 |
| 4.7 | 475 | 32.0 | 28.0 | 14.0 | 27.5 | 0.8 |
| 6.8 | 685 | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 |
| 8.2 | 825 | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 |
| 10 | 106 | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 |
| 12 | 126 | 32.0 | 37.0 | 22.0 | 27.5 | 0.8 |
| 15 | 156 | 32.0 | 37.0 | 22.0 | 27.5 | 0.8 |

■ **RATINGS & DIMENSIONS** (mm) continued...

| (μF) | Working Voltage | 250Vdc (2E) | | | | |
|-------|-----------------|-------------|------|-----|------|-----|
| | | 180Vac | | | | |
| | Code | W | H | T | P | d |
| 0.01 | 103 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| 0.012 | 123 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| 0.015 | 153 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| 0.018 | 183 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| 0.022 | 223 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| 0.027 | 273 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| 0.033 | 333 | 7.2 | 9.5 | 4.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.039 | 393 | 7.2 | 9.5 | 4.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.047 | 473 | 7.2 | 9.5 | 4.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.056 | 563 | 7.2 | 9.5 | 4.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.068 | 683 | 7.2 | 10.0 | 5.0 | 5.0 | 0.6 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.082 | 823 | 7.2 | 10.0 | 5.0 | 5.0 | 0.6 |
| | | 10.5 | 11.0 | 5.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.1 | 104 | 7.2 | 11.0 | 6.0 | 5.0 | 0.6 |
| | | 10.5 | 11.0 | 5.0 | 7.5 | 0.6 |
| | | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.12 | 124 | 7.2 | 11.0 | 6.0 | 5.0 | 0.6 |
| | | 10.5 | 11.0 | 5.0 | 7.5 | 0.6 |
| | | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 |
| 0.15 | 154 | 10.5 | 12.0 | 6.0 | 7.5 | 0.6 |
| | | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.18 | 184 | 10.5 | 12.0 | 6.0 | 7.5 | 0.6 |
| | | 13.0 | 12.0 | 6.0 | 10.0 | 0.6 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |

| (μF) | Working Voltage | 250Vdc (2E) | | | | |
|------|-----------------|-------------|------|------|------|-----|
| | | 180Vac | | | | |
| | Code | W | H | T | P | d |
| 0.22 | 224 | 13.0 | 12.0 | 6.0 | 10.0 | 0.6 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.27 | 274 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 |
| 0.33 | 334 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 |
| 0.39 | 394 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.47 | 474 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.56 | 564 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.68 | 684 | 17.5 | 14.5 | 8.5 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.82 | 824 | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| | | 32.0 | 18.0 | 9.0 | 27.5 | 0.8 |
| 1 | 105 | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 |
| | | 26.5 | 16.0 | 7.0 | 22.5 | 0.8 |
| | | 32.0 | 18.0 | 9.0 | 27.5 | 0.8 |
| 1.2 | 125 | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 |
| | | 26.5 | 17.0 | 8.5 | 22.5 | 0.8 |
| | | 32.0 | 18.0 | 9.0 | 27.5 | 0.8 |
| 1.5 | 155 | 26.5 | 17.0 | 8.5 | 22.5 | 0.8 |
| | | 32.0 | 18.0 | 9.0 | 27.5 | 0.8 |
| 1.8 | 185 | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 |
| | | 32.0 | 18.0 | 9.0 | 27.5 | 0.8 |
| 2.2 | 225 | 26.5 | 20.0 | 11.0 | 22.5 | 0.8 |
| | | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 |
| 2.5 | 255 | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 |
| 2.7 | 275 | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 |
| | | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 |
| 3.3 | 335 | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 |
| 3.9 | 395 | 32.0 | 22.0 | 13.0 | 27.5 | 0.8 |
| 4.7 | 475 | 32.0 | 28.0 | 14.0 | 27.5 | 0.8 |
| 5.6 | 565 | 32.0 | 24.5 | 15.0 | 27.5 | 0.8 |
| 6.8 | 685 | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 |
| 8.2 | 825 | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 |
| 10 | 106 | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 |
| 12 | 126 | 32.0 | 37.0 | 22.0 | 27.5 | 0.8 |
| 15 | 156 | 32.0 | 37.0 | 22.0 | 27.5 | 0.8 |

■ **RATINGS & DIMENSIONS** (mm) continued...

| (μF) | Working Voltage | 400Vdc (2G) | | | | |
|--------|-----------------|-------------|------|-----|------|-----|
| | | 250Vac | | | | |
| | Code | W | H | T | P | d |
| 0.0039 | 392 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| 0.0047 | 472 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| 0.0056 | 562 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| 0.0068 | 682 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| 0.0082 | 822 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| 0.01 | 103 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| 0.012 | 123 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| 0.015 | 153 | 7.2 | 9.5 | 4.5 | 5.0 | 0.6 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.018 | 183 | 7.2 | 9.5 | 4.5 | 5.0 | 0.6 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.022 | 223 | 7.2 | 9.5 | 4.5 | 5.0 | 0.6 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.027 | 273 | 7.2 | 10.0 | 5.0 | 5.0 | 0.6 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.033 | 333 | 7.2 | 11.0 | 6.0 | 5.0 | 0.6 |
| | | 10.5 | 11.0 | 5.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.039 | 393 | 7.2 | 11.0 | 6.0 | 5.0 | 0.6 |
| | | 10.5 | 11.0 | 5.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.047 | 473 | 7.2 | 11.0 | 6.0 | 5.0 | 0.6 |
| | | 10.5 | 11.0 | 5.0 | 7.5 | 0.6 |
| | | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 |
| 0.056 | 563 | 10.5 | 12.0 | 6.0 | 7.5 | 0.6 |
| | | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 |
| 0.068 | 683 | 10.5 | 12.0 | 6.0 | 7.5 | 0.6 |
| | | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.082 | 823 | 13.0 | 12.0 | 6.0 | 10.0 | 0.6 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.1 | 104 | 13.0 | 12.0 | 6.0 | 10.0 | 0.8 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |

| (μF) | Working Voltage | 400Vdc (2G) | | | | |
|------|-----------------|-------------|------|------|------|-----|
| | | 250Vac | | | | |
| | Code | W | H | T | P | d |
| 0.12 | 124 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.15 | 154 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 |
| 0.18 | 184 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.22 | 224 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.27 | 274 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.33 | 334 | 17.5 | 14.5 | 8.5 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.39 | 394 | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 |
| | | 26.5 | 16.0 | 7.0 | 22.5 | 0.8 |
| 0.47 | 474 | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 |
| | | 26.5 | 16.0 | 7.0 | 22.5 | 0.8 |
| | | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 |
| 0.56 | 564 | 26.5 | 17.0 | 8.5 | 22.5 | 0.8 |
| | | 32.0 | 18.0 | 9.0 | 27.5 | 0.8 |
| 0.68 | 684 | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 |
| | | 26.5 | 17.0 | 8.5 | 22.5 | 0.8 |
| 0.82 | 824 | 32.0 | 18.0 | 9.0 | 27.5 | 0.8 |
| | | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 |
| 1 | 105 | 26.5 | 20.0 | 11.0 | 22.5 | 0.8 |
| | | 32.0 | 18.0 | 9.0 | 27.5 | 0.8 |
| 1.2 | 125 | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 |
| | | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 |
| 1.5 | 155 | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 |
| | | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 |
| 1.8 | 185 | 32.0 | 22.0 | 13.0 | 27.5 | 0.8 |
| 2.2 | 225 | 32.0 | 24.5 | 15.0 | 27.5 | 0.8 |
| 2.5 | 255 | 32.0 | 28.0 | 14.0 | 27.5 | 0.8 |
| 2.7 | 275 | 32.0 | 28.0 | 14.0 | 27.5 | 0.8 |
| 3.3 | 335 | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 |
| 3.9 | 395 | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 |
| 4.7 | 475 | 32.0 | 37.0 | 22.0 | 27.5 | 0.8 |
| | | 42.0 | 31.5 | 18.0 | 37.5 | 0.8 |
| 5.6 | 565 | 32.0 | 37.0 | 22.0 | 27.5 | 0.8 |

■ RATINGS & DIMENSIONS (mm) continued...

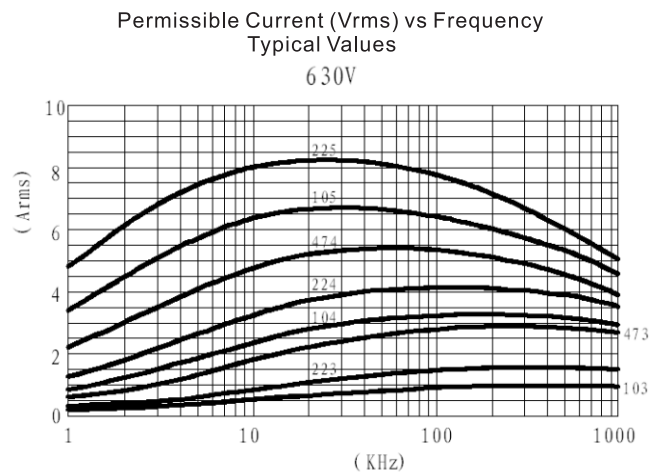
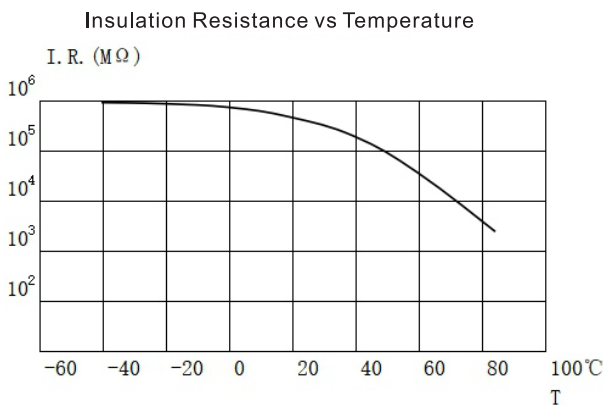
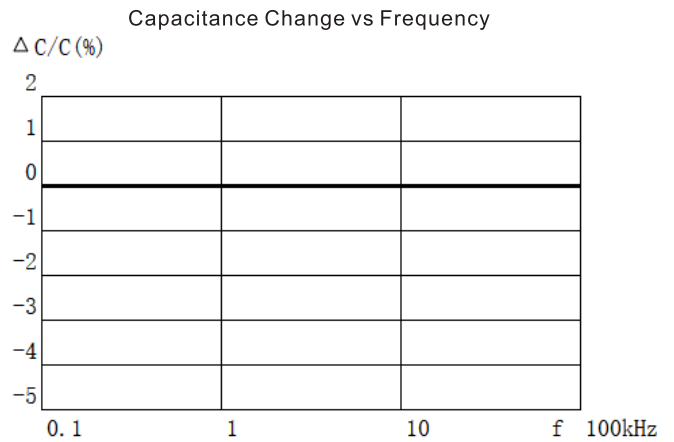
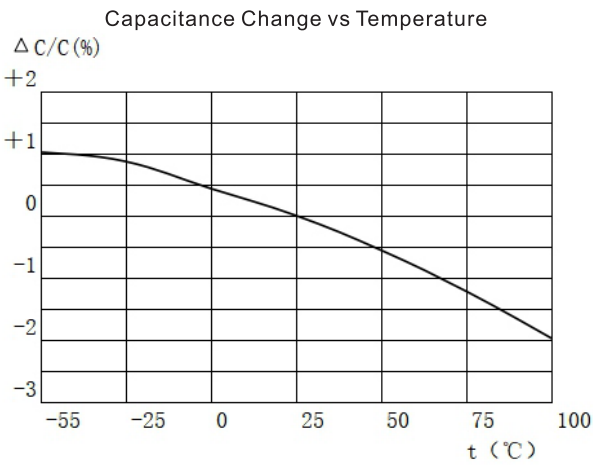
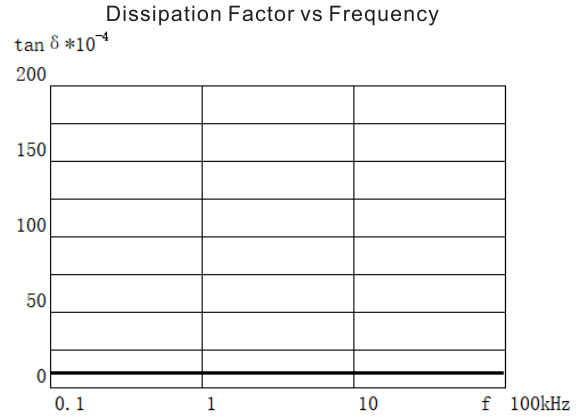
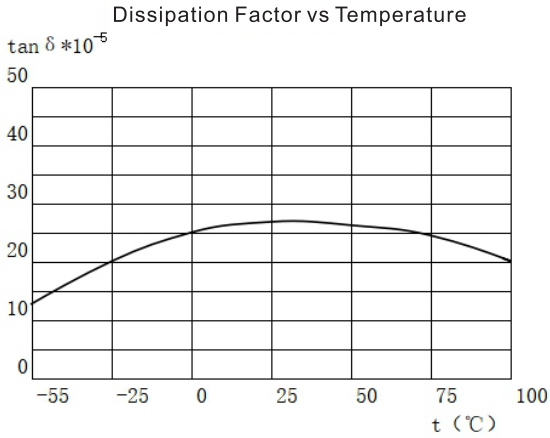
| (μ F) | Working Voltage | 630Vdc (2J) | | | | |
|------------|-----------------|-------------|------|-----|------|-----|
| | | 400Vac | | | | |
| | Code | W | H | T | P | d |
| 0.001 | 102 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.0012 | 122 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.0015 | 152 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.0018 | 182 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.0022 | 222 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.0027 | 272 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.0033 | 332 | 7.2 | 7.5 | 3.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.0039 | 392 | 7.2 | 9.5 | 4.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.0047 | 472 | 7.2 | 9.5 | 4.5 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.0056 | 562 | 7.2 | 10.0 | 5.0 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.0068 | 682 | 7.2 | 10.0 | 5.0 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.0082 | 822 | 7.2 | 11.0 | 6.0 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.01 | 103 | 7.2 | 11.0 | 6.0 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.012 | 123 | 7.2 | 11.0 | 6.0 | 5.0 | 0.5 |
| | | 10.5 | 9.0 | 4.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.015 | 153 | 10.5 | 11.0 | 5.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.018 | 183 | 10.5 | 11.0 | 5.0 | 7.5 | 0.6 |
| | | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 |
| 0.022 | 223 | 10.5 | 11.0 | 5.0 | 7.5 | 0.6 |
| | | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 |

| (μ F) | Working Voltage | 630Vdc (2J) | | | | |
|------------|-----------------|-------------|------|------|------|-----|
| | | 400Vac | | | | |
| | Code | W | H | T | P | d |
| 0.027 | 273 | 10.5 | 12.0 | 6.0 | 7.5 | 0.6 |
| | | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.033 | 333 | 10.5 | 12.0 | 6.0 | 7.5 | 0.6 |
| | | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.039 | 393 | 13.0 | 12.0 | 6.0 | 10.0 | 0.6 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.047 | 473 | 13.0 | 12.0 | 6.0 | 10.0 | 0.6 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.056 | 563 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.068 | 683 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 |
| 0.082 | 823 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.1 | 104 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.12 | 124 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.15 | 154 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.18 | 184 | 17.5 | 14.5 | 8.5 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.22 | 224 | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 |
| | | 26.5 | 16.0 | 7.0 | 22.5 | 0.8 |
| 0.27 | 274 | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 |
| | | 26.5 | 17.0 | 8.5 | 22.5 | 0.8 |
| 0.33 | 334 | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 |
| | | 26.5 | 17.0 | 8.5 | 22.5 | 0.8 |
| 0.39 | 394 | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 |
| | | 32.0 | 18.0 | 9.0 | 27.5 | 0.8 |
| 0.47 | 474 | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 |
| | | 32.0 | 18.0 | 9.0 | 27.5 | 0.8 |
| 0.56 | 564 | 26.5 | 20.0 | 11.0 | 22.5 | 0.8 |
| | | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 |
| 0.68 | 684 | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 |
| | | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 |
| 0.82 | 824 | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 |
| 1 | 105 | 32.0 | 22.0 | 13.0 | 27.5 | 0.8 |
| 1.2 | 125 | 32.0 | 24.5 | 15.0 | 27.5 | 0.8 |
| 1.5 | 155 | 32.0 | 28.0 | 14.0 | 27.5 | 0.8 |
| 1.8 | 185 | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 |
| 2.2 | 225 | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 |
| 2.7 | 275 | 32.0 | 37.0 | 22.0 | 27.5 | 0.8 |
| 3.3 | 335 | 32.0 | 37.0 | 22.0 | 27.5 | 0.8 |

■ RATINGS & DIMENSIONS (mm) continued...

| μF | Working Voltage | 1000VDC (3A) | | | | | 1600Vdc (3C) | | | | | 2000Vdc (3D) | | | | |
|---------|-----------------|--------------|------|------|------|-----|--------------|------|------|------|-----|--------------|------|------|------|-----|
| | | 600Vac | | | | | 650Vac | | | | | 700Vac | | | | |
| | Code | W | H | T | P | dø | W | H | T | P | dø | W | H | T | P | dø |
| 0.00056 | 561 | | | | | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.00068 | 681 | | | | | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.00082 | 821 | | | | | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.001 | 102 | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.0012 | 122 | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.0015 | 152 | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.0018 | 182 | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| 0.0022 | 222 | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | | | | | | | | | | |
| 0.0027 | 272 | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | | | | | | | | | | |
| 0.0033 | 332 | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | | | | | | | | | | |
| 0.0039 | 392 | 13.0 | 9.0 | 4.0 | 10.0 | 0.6 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | | | | | | | | | | |
| 0.0047 | 472 | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | | | | | | | | | | |
| 0.0056 | 562 | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | | | | | | | | | | |
| 0.0068 | 682 | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | | | | | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.0082 | 822 | 13.0 | 12.0 | 6.0 | 10.0 | 0.6 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | | | | | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.01 | 103 | 13.0 | 12.0 | 6.0 | 10.0 | 0.6 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 |
| | | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | | | | | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.012 | 123 | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 | 17.5 | 14.5 | 8.5 | 15.0 | 0.8 |
| | | | | | | | | | | | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.015 | 153 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 | 17.5 | 14.5 | 8.5 | 15.0 | 0.8 |
| | | | | | | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 |
| 0.018 | 183 | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 | 26.5 | 16.0 | 7.0 | 22.5 | 0.8 |
| 0.022 | 223 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 | 17.5 | 14.5 | 8.5 | 15.0 | 0.8 | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 | 26.5 | 17.0 | 8.5 | 22.5 | 0.8 |
| 0.027 | 273 | 17.5 | 13.5 | 7.5 | 15.0 | 0.8 | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 | 26.5 | 17.0 | 8.5 | 22.5 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 | 26.5 | 16.0 | 7.0 | 22.5 | 0.8 | | | | | |
| 0.033 | 333 | 17.5 | 14.5 | 8.5 | 15.0 | 0.8 | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 | 26.5 | 16.0 | 7.0 | 22.5 | 0.8 | | | | | |
| 0.039 | 393 | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 |
| | | 26.5 | 15.0 | 6.0 | 22.5 | 0.8 | 26.5 | 17.0 | 8.5 | 22.5 | 0.8 | | | | | |
| 0.047 | 473 | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 |
| | | 26.5 | 16.0 | 7.0 | 22.5 | 0.8 | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 | | | | | |
| 0.056 | 563 | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 |
| | | 26.5 | 16.0 | 7.0 | 22.5 | 0.8 | | | | | | | | | | |
| 0.068 | 683 | 18.0 | 14.5 | 8.5 | 15.0 | 0.8 | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | | | | | |
| | | 26.5 | 17.0 | 8.5 | 22.5 | 0.8 | | | | | | | | | | |
| 0.082 | 823 | 226.5 | 17.0 | 8.5 | 22.5 | 0.8 | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | | | | | |
| 0.1 | 104 | 18.0 | 16.0 | 10.0 | 15.0 | 0.8 | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | | | | | |
| | | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 | | | | | | | | | | |
| 0.12 | 124 | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | | | | | | | | | | |
| 0.15 | 154 | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | | | | | | | | | | |

■ **Vrms vs. FREQUENCY (Typical Value)**



■ **RADIAL TAPING**

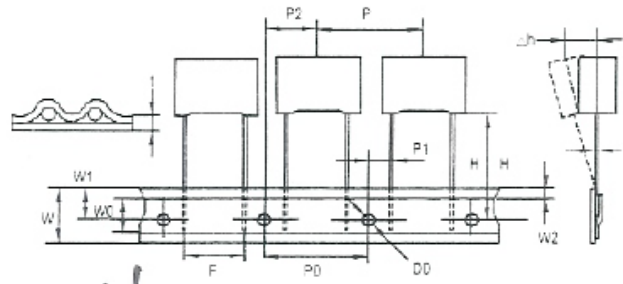


Fig.1 Box
F=5 and 7.5mm
(RT1 or RT2)

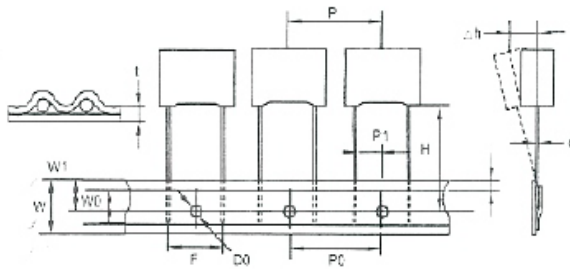


Fig. 2 Box
Fitch=7.5mm
Ammo Only
(RT2)

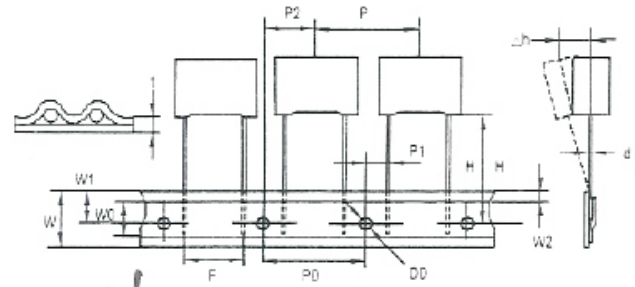


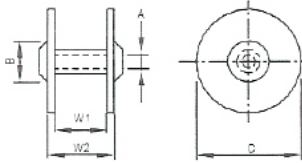
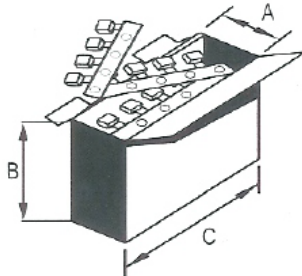
Fig. 3 Box or Epoxy Coated
F=10 - Ammo Only
F=15 Every other space skipped because
of Larger body - Ammo Only
(RT3 or RT4)

■ **SPECIFICATIONS**

| Description | Letter | Dimension (mm) | | | | |
|--------------------------------------|--------|----------------|----------|------|---------|---------|
| | | RT1 | RT2 | RT3 | RT4 | Tol. |
| Lead Wire Diameter | d | 0.5/0.6 | 0.5/0.6 | 0.6 | 0.6/0.8 | ±0.05 |
| Tape Pitch | P | 12.7 | 12.7 | 12.7 | 25.4 | ±1 |
| Feed Hole Pitch | P0 | 12.7 | 12.7 | 12.7 | 12.7 | ±0.2 |
| Centering of the Lead Wire | P1 | 3.85 | 2.6/3.75 | 7.7 | 5.2 | ±0.7 |
| Centering of the Body | P2 | 6.35 | 6.35 | 12.7 | 12.7 | ±1.3 |
| Lead Spacing | F | 5 | 7.5 | 10 | 15 | 0 |
| Component Alignment | Δh | 0 | 0 | 0 | 0 | ±2 |
| Height of Component from Tape Center | H | 18.5 | 18.5 | 18.5 | 18.5 | ±0.5 |
| Carrier Tape Width | W | 18 | 18 | 18 | 18 | +1;-0.5 |
| Hold Down Tape Width | W0 | 6 | 6 | 9 | 10 | Min |
| Hole Position | W1 | 9 | 9 | 9 | 9 | ±0.5 |
| Hold Down Tape Position | W2 | 3 | 3 | 3 | 3 | Max |
| Feed Hole Diameter | Do | 4 | 4 | 4 | 4 | ±0.2 |
| Tape Thickness | t | 0.5 | 0.5 | 0.5 | 0.5 | ±0.2 |
| Figure | fig | 1 | 1 or 2 | 3 | 3 | |

Remark: *Allowance of accumulated pitch less than 1mm at the sum of 20 pitches.
 *Continuous empty component less than 3 consecutive pieces.
 *Total empty on one reel less than 1%.

■ **PACKAGING**

| Packaging Type | Reel Packing | | Ammo Box Packing | |
|--------------------------|--------------|---|------------------|--|
| | |  | |  |
| Dimensions unit: mm | A | 14 ~ 30 | A | 50 ⁺⁵ ₋₂ |
| | B | 80 min | B | 260 ₊₂ |
| | D | 370 max | C | 330 ₊₂ |
| | W1 | 45 ⁺⁵ ₋₂ | | |
| | W2 | 55max | | |
| Packing Qty Per Reel/Box | C ≤ 0.022 | C > 0.022 | C ≤ 0.047 | C > 0.047 |
| | 1,500 pcs | 1,000 pcs | 1,500 pcs | 1,000 pcs |