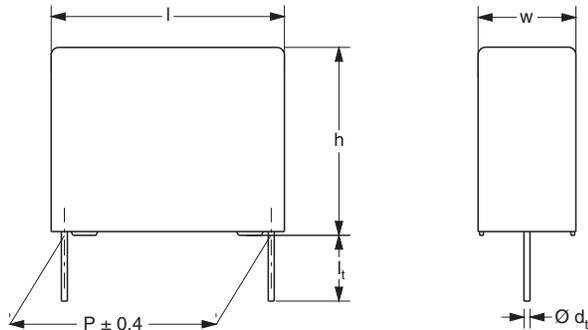




AC and Pulse Metallized Polypropylene Film Capacitors KP/MMKP Radial Potted Type



Dimensions in mm

APPLICATIONS

Where high currents and steep pulses occur.
Power supplies.

MARKING

C-value; tolerance; rated voltage; manufacturer's type designation; code for dielectric material; manufacturer's emblem; code for factory of origin; year and week of manufacture

DIELECTRIC

Polypropylene film

ELECTRODES

Metallized film and aluminum foil

ENCAPSULATION

Flame retardant plastic case and epoxy resin
(UL-class 94 V-0)

CONSTRUCTION

Internal serial construction

LEADS

Tinned wire

CAPACITANCE RANGE (E24 SERIES)

0.0047 μ F to 0.27 μ F

FEATURES

15 mm to 27.5 mm pitch. Supplied loose and taped on reel

Material categorization:
for definitions of compliance please see
www.vishay.com/doc?99912

CAPACITANCE TOLERANCE

$\pm 5\%$; $\pm 3.5\%$

RATED (DC) VOLTAGE

630 V; 1000 V

RATED (AC) VOLTAGE

300 V; 400 V

RATED PEAK-TO-PEAK VOLTAGE

850 V; 1100 V

CLIMATIC CATEGORY

55/100/56

RATED TEMPERATURE

85 °C

MAXIMUM APPLICATION TEMPERATURE

100 °C

REFERENCE SPECIFICATIONS

IEC 60384-17

PERFORMANCE GRADE

Grade 1 (long life)

STABILITY GRADE

Grade 2

DETAIL SPECIFICATION

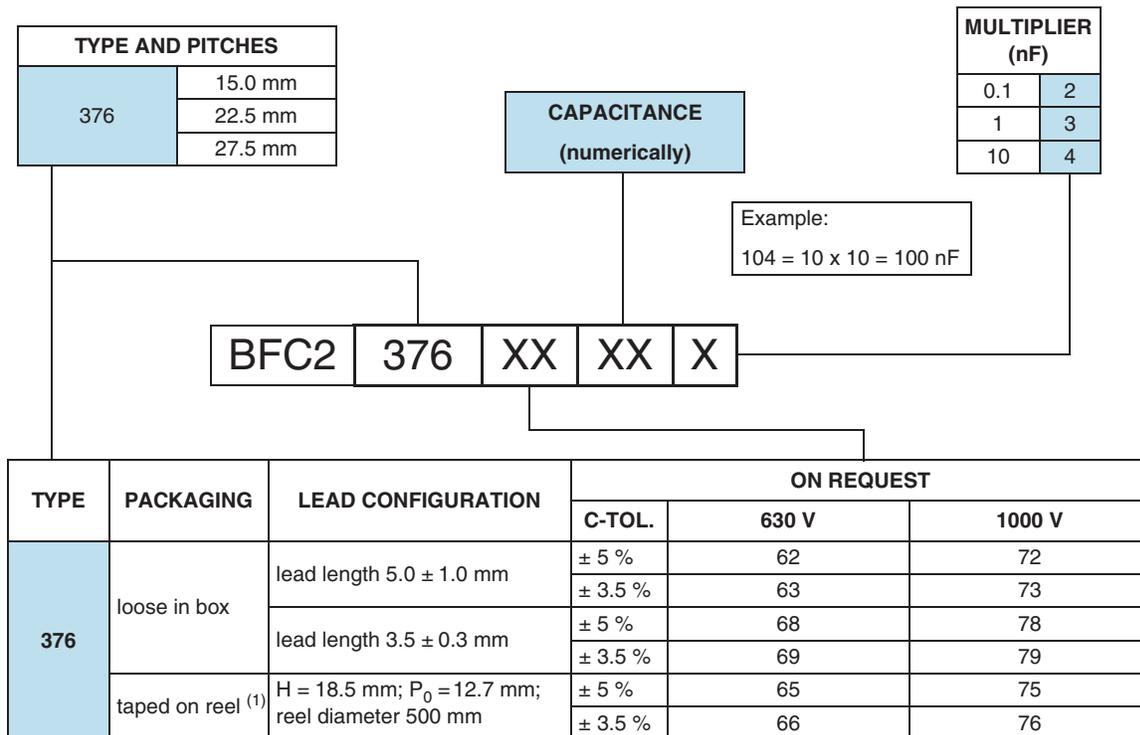
For more detailed data and test requirements see "Type Detail Specification HQN-384-17/101"



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)



COMPOSITION OF CATALOG NUMBER



Note

(1) For detailed tape specification refer to "Packaging Information": www.vishay.com/doc?28139

SPECIFIC REFERENCE DATA (630 V_{DC})

| DESCRIPTION | VALUE | |
|---|------------------------|-------------------------|
| | at 10 kHz | at 100 kHz |
| Tangent of loss angle: | | |
| P = 15.0 mm | ≤ 5 x 10 ⁻⁴ | ≤ 10 x 10 ⁻⁴ |
| P = 22.5 mm | ≤ 6 x 10 ⁻⁴ | ≤ 15 x 10 ⁻⁴ |
| P = 27.5 mm | ≤ 7 x 10 ⁻⁴ | ≤ 20 x 10 ⁻⁴ |
| Rated voltage pulse slope (dU/dt) _R : | | |
| P = 15.0 mm | 4000 V/μs | |
| P = 22.5 mm | 1400 V/μs | |
| P = 27.5 mm | 900 V/μs | |
| R between leads at 500 V; 1 min | > 100 000 MΩ | |
| R between interconnected leads and case; 500 V; 1 min | > 100 000 MΩ | |
| Ionization (AC) voltage (typical value) at 50 pC peak discharge | > 400 V | |
| Withstanding (DC) voltage (cut off current 10 mA) ⁽¹⁾ ; rise time 1000 V/s | 1008 V; 1 min | |
| Withstanding (DC) voltage between leads and case | 2840 V; 1 min | |

Note

(1) See "Voltage Proof Test for Metalized Film Capacitors": www.vishay.com/doc?28169



$U_{RDC} = 630 \text{ V}$; $U_{RAC} = 300 \text{ V}$; $U_{P-P} = 850 \text{ V}$

| C (μF) | DIMENSIONS W x H x L (mm) | MASS (g) ⁽²⁾ | CATALOG NUMBER BFC2 376 AND PACKAGING | | |
|--|---------------------------------|----------------------------|---|-----------|--|
| | | | LOOSE IN BOX | | REEL ⁽¹⁾ H = 18.5 mm P ₀ = 12.7 mm |
| | | | $l_t = 5.0 \pm 1.0 \text{ mm}$ | ALL LEADS | |
| | | | C-tol. = $\pm 5 \%$ | SPQ | SPQ |
| LAST 5 DIGITS OF CATALOG NUMBER | | | | | |
| Pitch = $15.0 \pm 0.4 \text{ mm}$; $d_t = 0.60 \pm 0.06 \text{ mm}$ | | | | | |
| 0.0068 0.0075 0.0082 0.0091 | 5.0 x 11.0 x 17.5 | 1.1 | 62682 | 1000 | 1100 |
| | | | 62752 | | |
| | | | 62822 | | |
| | | | 62912 | | |
| 0.010 0.011 0.012 0.013 | 6.0 x 12.0 x 17.5 | 1.5 | 62103 | 1000 | 900 |
| | | | 62113 | | |
| | | | 62123 | | |
| | | | 62133 | | |
| Pitch = $15.0 \pm 0.4 \text{ mm}$; $d_t = 0.80 \pm 0.08 \text{ mm}$ | | | | | |
| 0.015 0.016 0.018 | 7.0 x 13.5 x 17.5 | 2.0 | 62153 | 1000 | 800 |
| | | | 62163 | | |
| | | | 62183 | | |
| 0.020 0.022 | 8.5 x 15.0 x 17.5 | 2.6 | 62203 | 1000 | 650 |
| | | | 62223 | | |
| Pitch = $22.5 \pm 0.4 \text{ mm}$; $d_t = 0.80 \pm 0.08 \text{ mm}$ | | | | | |
| 0.024 0.027 0.030 | 6.0 x 15.5 x 26.0 | 2.8 | 62243 | 300 | 600 |
| | | | 62273 | | |
| | | | 62303 | | |
| 0.033 0.036 0.039 | 7.0 x 16.5 x 26.0 | 3.5 | 62333 | 200 | 550 |
| | | | 62363 | | |
| | | | 62393 | | |
| 0.043 0.047 0.051 0.056 | 8.5 x 18.0 x 26.0 | 4.5 | 62433 | 200 | 450 |
| | | 4.5 | 62473 | | |
| | | 4.5 | 62513 | | |
| | | 5.1 | 62563 | | |
| Pitch = $27.5 \pm 0.4 \text{ mm}$; $d_t = 0.80 \pm 0.08 \text{ mm}$ | | | | | |
| 0.062 0.068 0.075 | 9.0 x 19.0 x 31.0 | 6.2 | 62623 | 100 | |
| | | | 62683 | | |
| | | | 62753 | | |
| 0.082 0.091 0.10 0.11 | 11.0 x 21.0 x 31.0 | 8.3 | 62823 | 100 | |
| | | | 62913 | | |
| | | | 62104 | | |
| | | | 62114 | | |
| 0.12 0.13 0.15 0.16 | 13.0 x 23.0 x 31.0 | 10.8 | 62124 | 100 | |
| | | | 62134 | | |
| | | | 62154 | | |
| | | | 62164 | | |
| 0.18 0.20 | 15.0 x 25.0 x 31.0 | 13.0 | 62184 | 100 | |
| | | | 62204 | | |
| 0.22 0.24 0.27 | 18.0 x 28.0 x 31.0 | 19.0 | 62224 | 100 | |
| | | | 62244 | | |
| | | | 62274 | | |

Notes

- SPQ = Standard Packing Quantity

⁽¹⁾ H = in-tape height; P₀ = sprocket hole distance; for detailed specifications refer to packaging information

⁽²⁾ Weight for short lead product only

SPECIFIC REFERENCE DATA (1000 V_{DC})

| DESCRIPTION | VALUE | |
|---|---|--|
| | at 10 kHz | at 100 kHz |
| Tangent of loss angle: P = 15.0 mm P = 22.5 mm P = 27.5 mm | $\leq 5 \times 10^{-4}$ $\leq 6 \times 10^{-4}$ $\leq 8 \times 10^{-4}$ | $\leq 10 \times 10^{-4}$ $\leq 15 \times 10^{-4}$ $\leq 20 \times 10^{-4}$ |
| Rated voltage pulse slope (dU/dt) _R : P = 15.0 mm P = 22.5 mm P = 27.5 mm | 7000 V/μs 2500 V/μs 1600 V/μs | |
| R between leads at 500 V; 1 min | > 100 000 MΩ | |
| R between interconnected leads and case; 500 V; 1 min | > 100 000 MΩ | |
| Ionization (AC) voltage (typical value) at 50 pC peak discharge | > 500 V | |
| Withstanding (DC) voltage (cut off current 10 mA) ⁽¹⁾ ; rise time 1000 V/s for C ≤ 47 nF for C > 47 nF | 1600 V; 1 min [1, 6 - (0, 0364 · √C - 47)] × 1000 V; 1 min | |
| Withstanding (DC) voltage between leads and case | 2840 V; 1 min | |

Note

⁽¹⁾ See "Voltage Proof Test for Metalized Film Capacitors": www.vishay.com/doc?28169

U_{RDC} = 1000 V; U_{RAC} = 400 V; U_{P-P} = 1100 V

| C (μF) | DIMENSIONS W x H x L (mm) | MASS (g) ⁽²⁾ | CATALOG NUMBER BFC2 376 AND PACKAGING | | |
|---|---|----------------------------|--|------------|--|
| | | | LOOSE IN BOX | | REEL ⁽¹⁾ H = 18.5 mm P ₀ = 12.7 mm |
| | | | l _t = 5.0 ± 1.0 mm | ALL LEADS | |
| | | | C-tol. = ± 5 % | SPQ | SPQ |
| Pitch = 15.0 ± 0.4 mm; d_t = 0.60 ± 0.06 mm | | | | | |
| 0.0047 0.0051 0.0056 | 5.0 x 11.0 x 17.5 | 1.1 | 72472 72512 72562 | 1000 | 1100 |
| 0.0062 0.0068 0.0075 0.0082 | 6.0 x 12.0 x 17.5 | 1.5 | 72622 72682 72752 72822 | 1000 | 900 |
| Pitch = 15.0 ± 0.4 mm; d_t = 0.80 ± 0.08 mm | | | | | |
| 0.0091 0.010 0.011 0.012 | 7.0 x 13.5 x 17.5 | 2.0 | 72912 72103 72113 72123 | 1000 | 800 |
| Pitch = 22.5 ± 0.4 mm; d_t = 0.80 ± 0.08 mm | | | | | |
| 0.013 0.015 0.016 0.018 | 6.0 x 15.5 x 26.0 7.0 x 16.5 x 26.0 | 2.8 3.5 | 72133 72153 72163 72183 | 300 200 | 600 550 |
| 0.020 0.022 0.024 0.027 0.03 0.033 0.036 0.039 | 8.5 x 18.0 x 26.0 10.0 x 19.5 x 26.0 | 4.5 5.4 | 72203 72223 72243 72273 72303 72333 72363 72393 | 200 | 450 350 |



| C (μ F) | DIMENSIONS W x H x L (mm) | MASS (g) ⁽²⁾ | CATALOG NUMBER BFC2 376 AND PACKAGING | | |
|---|---------------------------------|----------------------------|---|-----------|--|
| | | | LOOSE IN BOX | | REEL ⁽¹⁾ H = 18.5 mm P ₀ = 12.7 mm |
| | | | $l_t = 5.0 \pm 1.0$ mm | ALL LEADS | |
| | | | C-tol. = ± 5 % | SPQ | SPQ |
| LAST 5 DIGITS OF CATALOG NUMBER | | | | | |
| Pitch = 27.5 ± 0.4 mm; $d_t = 0.80 \pm 0.08$ mm | | | | | |
| 0.043 | 9.0 x 19.0 x 31.0 | 6.2 | 72433 | 100 | |
| 0.047 | | | 72473 | | |
| 0.051 | | | 72513 | | |
| 0.056 | 11.0 x 21.0 x 31.0 | 8.3 | 72563 | 100 | |
| 0.062 | | | 72623 | | |
| 0.068 | | | 72683 | | |
| 0.075 | | | 72753 | | |
| 0.082 | 13.0 x 23.0 x 31.0 | 10.8 | 72823 | 100 | |
| 0.091 | | | 72913 | | |
| 0.10 | | | 72104 | | |
| 0.11 | 15.0 x 25.0 x 31.0 | 13.0 | 72114 | 100 | |
| 0.12 | | | 72124 | | |
| 0.13 | | | 72134 | | |
| 0.15 | | | 72154 | | |
| 0.16 | 18.0 x 28.0 x 31.0 | 19.0 | 72164 | 100 | |
| 0.18 | | | 72184 | | |

Notes

- SPQ = Standard Packing Quantity

⁽¹⁾ H = in-tape height; P₀ = sprocket hole distance; for detailed specifications refer to packaging information

⁽²⁾ Weight for short lead product only



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