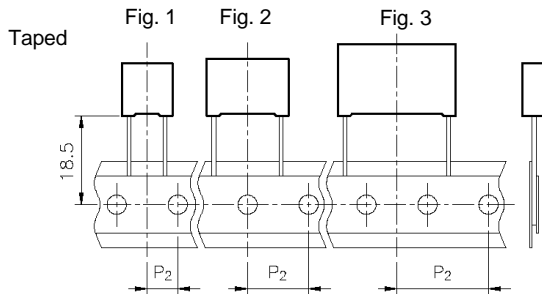
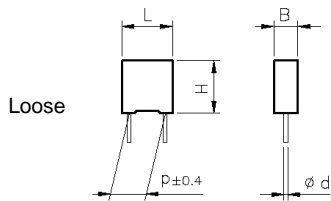


POLYPROPYLENE CAPACITOR WITH DOUBLE SIDED METALLIZED FILM ELECTRODES D.C. AND PULSE APPLICATIONS

Typical applications: deflection circuits in TV-sets (S-correction and fly-back tuning) and monitors, switching spikes suppression in SMPS, lamp capacitor for electronic ballast and compact lamps, SNUBBER and SCR commutating circuits, applications with high voltage and high current.

PRODUCT CODE: R76



| | | | |
|----------|--------|---------------|----------|
| Ø d±0.05 | p ≤ 10 | 15 ≤ p ≤ 27.5 | p = 37.5 |
| | 0.6 | 0.8 | 1.0 |

All dimensions are in mm.

PRODUCT CODE SYSTEM

The part number, comprising 14 digits, is formed as follows:

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| R | 7 | 6 | | | | | | | | | | - | |

Digit 1 to 3 Series code.

Digit 4 d.c. rated voltage:

I = 250V M = 400V P = 630V
Q = 1000V T = 1600V U = 2000V

Digit 5 Pitch:

D=7.5 mm; F=10mm; I=15mm; N=22.5mm;
R=27.5mm; W=37.5mm.

Digit 6 to 9 Digits 7 - 8 - 9 indicate the first three digits of Capacitance value and the 6th digit indicates the number of zeros that must be added to obtain the Rated Capacitance in pF.

Digit 10 to 11 Mechanical version and/or packaging (table 1)

Digit 12 Identifies the dimensions and electrical characteristics.

Digit 13 Internal use.

Digit 14 Capacitance tolerance:
H=2.5%; J=5%; K=10%

GENERAL TECHNICAL DATA

Dielectric: polypropylene film.

Plates: double sided metallized polyester film.

Winding: non-inductive type.

Leads: tinned wire.

Protection: plastic case, epoxy resin filled. Box material is solvent resistant and flame retardant according to UL94 V0.

Marking: manufacturer's logo, series (R76), dielectric code (MKP), capacitance, tolerance, D.C. rated voltage, manufacturing date code.

Climatic category: 55/100/56 IEC 60068-1

Operating temperature range: -55 to +105°C

Related documents: IEC 60384-16

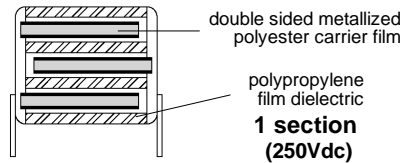
Table 1

| Standard packaging style | Lead length (mm) | Taping style | | | Ordering code (Digit 10 to 11) |
|------------------------------|---------------------|---------------------|------------|------------|--------------------------------|
| | | P ₂ (mm) | Fig. (No.) | Pitch (mm) | |
| AMMO-PACK | | 6.35 | 1 | 7.5 | DQ |
| AMMO-PACK | | 12.70 | 2 | 10.0/15.0 | DQ |
| AMMO-PACK | | 19.05 | 3 | 22.5 | DQ |
| REEL Ø 355mm | | 6.35 | 1 | 7.5 | CK |
| REEL Ø 355mm | | 12.70 | 2 | 10.0/15.0 | GY |
| REEL Ø 500mm | | 12.70 | 2 | 10.0/15.0 | CK |
| REEL Ø 500mm | | 19.05 | 3 | 22.5/27.5 | CK |
| Loose, short leads | 4 ⁺² | | | | SE |
| Loose, long leads (p ≤ 10mm) | 17 ^{+1/-2} | | | | Z3 |
| Loose, long leads (p ≥ 15mm) | 30 ⁺⁵ | | | | 40 |
| | 25 ^{+2/-1} | | | | 50 |

Note: Ammo-pack is the preferred packaging for taped version.

POLYPROPYLENE CAPACITOR WITH DOUBLE SIDED METALLIZED FILM ELECTRODES. D.C. AND PULSE APPLICATIONS

PRODUCT CODE: R76



| Rated Cap. | 250Vdc / 180Vac | | | | Max dv/dt (V/μs) | Max K ₀ (V ² /μs) | Part Number |
|------------|-----------------|------|------|------|------------------|---|----------------|
| | B | H | L | p | | | |
| 6800pF | 3.0 | 8.0 | 10.0 | 7.5 | 1100 | 55 E4 | R76ID1680--3-- |
| 8200pF | 3.0 | 8.0 | 10.0 | 7.5 | 1100 | 55 E4 | R76ID1820--3-- |
| 0.010μF | 3.0 | 8.0 | 10.0 | 7.5 | 1100 | 55 E4 | R76ID2100--3-- |
| 0.012μF | 3.5 | 8.5 | 10.5 | 7.5 | 1100 | 55 E4 | R76ID2120--3-- |
| 0.015μF | 3.5 | 8.5 | 10.5 | 7.5 | 1100 | 55 E4 | R76ID2150--3-- |
| 0.018μF | 3.5 | 8.5 | 10.5 | 7.5 | 1100 | 55 E4 | R76ID2180--3-- |
| 0.022μF | 4.0 | 9.0 | 10.5 | 7.5 | 1100 | 55 E4 | R76ID2220--3-- |
| 0.027μF | 5.0 | 11.0 | 10.5 | 7.5 | 1100 | 55 E4 | R76ID2270--3-- |
| 0.033μF | 5.0 | 11.0 | 10.5 | 7.5 | 1100 | 55 E4 | R76ID2330--3-- |
| 0.039μF | 6.0 | 12.0 | 10.5 | 7.5 | 1100 | 55 E4 | R76ID2390--3-- |
| 0.047μF | 6.0 | 12.0 | 10.5 | 7.5 | 1100 | 55 E4 | R76ID2470--3-- |
| 0.027μF | 4.0 | 9.0 | 13.0 | 10.0 | 1000 | 50 E4 | R76IF2270--3-- |
| 0.033μF | 4.0 | 9.0 | 13.0 | 10.0 | 1000 | 50 E4 | R76IF2330--3-- |
| 0.039μF | 4.0 | 9.0 | 13.0 | 10.0 | 1000 | 50 E4 | R76IF2390--3-- |
| 0.047μF | 5.0 | 11.0 | 13.0 | 10.0 | 1000 | 50 E4 | R76IF2470--3-- |
| 0.056μF | 5.0 | 11.0 | 13.0 | 10.0 | 1000 | 50 E4 | R76IF2560--3-- |
| 0.068μF | 6.0 | 12.0 | 13.0 | 10.0 | 1000 | 50 E4 | R76IF2680--3-- |
| 0.082μF | 6.0 | 12.0 | 13.0 | 10.0 | 1000 | 50 E4 | R76IF2820--3-- |
| 0.068μF | 5.0 | 11.0 | 18.0 | 15.0 | 550 | 28 E4 | R76II2680--3-- |
| 0.082μF | 5.0 | 11.0 | 18.0 | 15.0 | 550 | 28 E4 | R76II2820--3-- |
| 0.10μF | 5.0 | 11.0 | 18.0 | 15.0 | 550 | 28 E4 | R76II3100--3-- |
| 0.12μF | 6.0 | 12.0 | 18.0 | 15.0 | 550 | 28 E4 | R76II3120--3-- |
| 0.15μF | 6.0 | 12.0 | 18.0 | 15.0 | 550 | 28 E4 | R76II3150--3-- |
| 0.18μF | 7.5 | 13.5 | 18.0 | 15.0 | 550 | 28 E4 | R76II3180--3-- |
| 0.18μF | 9.0 | 12.5 | 18.0 | 15.0 | 550 | 28 E4 | R76II3180--7-- |
| 0.22μF | 7.5 | 13.5 | 18.0 | 15.0 | 550 | 28 E4 | R76II3220--3-- |
| 0.22μF | 9.0 | 12.5 | 18.0 | 15.0 | 550 | 28 E4 | R76II3220--7-- |
| 0.27μF | 8.5 | 14.5 | 18.0 | 15.0 | 550 | 28 E4 | R76II3270--3-- |
| 0.27μF | 9.0 | 12.5 | 18.0 | 15.0 | 550 | 28 E4 | R76II3270--7-- |
| 0.33μF | 10.0 | 16.0 | 18.0 | 15.0 | 550 | 28 E4 | R76II3330--3-- |
| 0.33μF | 13.0 | 12.0 | 18.0 | 15.0 | 550 | 28 E4 | R76II3330--7-- |
| 0.39μF | 10.0 | 16.0 | 18.0 | 15.0 | 550 | 28 E4 | R76II3390--3-- |
| 0.47μF | 11.0 | 19.0 | 18.0 | 15.0 | 550 | 28 E4 | R76II3470--3-- |

Mechanical version and packaging (Table 1) _____
 Internal use _____
 Tolerance: H (±2.5%); J (±5%); K (±10%) _____

| Rated Cap. | 250Vdc / 180Vac | | | | Max dv/dt (V/μs) | Max K ₀ (V ² /μs) | Part Number |
|------------|-----------------|------|------|------|------------------|---|----------------|
| | B | H | L | p | | | |
| 0.22μF | 6.0 | 15.0 | 26.5 | 22.5 | 250 | 13 E4 | R76IN3220--0-- |
| 0.27μF | 6.0 | 15.0 | 26.5 | 22.5 | 250 | 13 E4 | R76IN3270--3-- |
| 0.33μF | 6.0 | 15.0 | 26.5 | 22.5 | 250 | 13 E4 | R76IN3330--3-- |
| 0.39μF | 7.0 | 16.0 | 26.5 | 22.5 | 250 | 13 E4 | R76IN3390--3-- |
| 0.47μF | 7.0 | 16.0 | 26.5 | 22.5 | 250 | 13 E4 | R76IN3470--3-- |
| 0.56μF | 8.5 | 17.0 | 26.5 | 22.5 | 250 | 13 E4 | R76IN3560--3-- |
| 0.68μF | 10.0 | 18.5 | 26.5 | 22.5 | 250 | 13 E4 | R76IN3680--3-- |
| 0.82μF | 10.0 | 18.5 | 26.5 | 22.5 | 250 | 13 E4 | R76IN3820--3-- |
| 1.0μF | 11.0 | 20.0 | 26.5 | 22.5 | 250 | 13 E4 | R76IN4100--3-- |
| 1.2μF | 13.0 | 22.0 | 26.5 | 22.5 | 250 | 13 E4 | R76IN4120--3-- |
| 0.82μF | 9.0 | 17.0 | 32.0 | 27.5 | 200 | 10 E4 | R76IR3820--3-- |
| 1.0μF | 11.0 | 20.0 | 32.0 | 27.5 | 200 | 10 E4 | R76IR4100--3-- |
| *1.2μF | 13.0 | 22.0 | 32.0 | 27.5 | 200 | 10 E4 | R76IR4120--3-- |
| *1.5μF | 13.0 | 22.0 | 32.0 | 27.5 | 200 | 10 E4 | R76IR4150--3-- |
| *1.8μF | 15.0 | 24.5 | 32.0 | 27.5 | 200 | 10 E4 | R76IR4180--3-- |
| *2.2μF | 15.0 | 24.5 | 32.0 | 27.5 | 200 | 10 E4 | R76IR4220--3-- |
| *2.7μF | 18.0 | 33.0 | 32.0 | 27.5 | 200 | 10 E4 | R76IR4270--3-- |
| *3.3μF | 18.0 | 33.0 | 32.0 | 27.5 | 200 | 10 E4 | R76IR4330--3-- |
| *3.9μF | 18.0 | 33.0 | 32.0 | 27.5 | 200 | 10 E4 | R76IR4390--3-- |
| *4.7μF | 22.0 | 37.0 | 32.0 | 27.5 | 200 | 10 E4 | R76IR4470--3-- |
| 5.6μF | 19.0 | 32.0 | 41.5 | 37.5 | 100 | 5 E4 | R76IW4560--3-- |
| 6.8μF | 20.0 | 40.0 | 41.5 | 37.5 | 100 | 5 E4 | R76IW4680--3-- |
| 8.2μF | 20.0 | 40.0 | 41.5 | 37.5 | 100 | 5 E4 | R76IW4820--3-- |
| 10.0μF | 24.0 | 44.0 | 41.5 | 37.5 | 100 | 5 E4 | R76IW5100--3-- |

Mechanical version and packaging (Table 1) _____
 Internal use _____
 Tolerance: H (±2.5%); J (±5%); K (±10%) _____

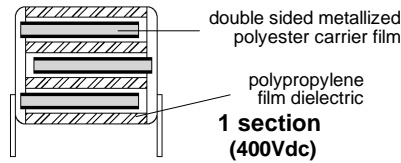
All dimensions are in mm.

Note: If the working voltage (V) is lower than the rated voltage (V_R), the capacitor may work at higher dv/dt. In this case the maximum value allowed is obtained multiplying the above value (see table dv/dt) with the ratio V_R/V. The pulse characteristic K₀ depends on the voltage wave-form and in any case it cannot overcome the value given in the above table. The dv/dt test is carried out at 2 times the above values.

* These values are available in pitch 37.5 mm upon request.

POLYPROPYLENE CAPACITOR WITH DOUBLE SIDED METALLIZED FILM ELECTRODES. D.C. AND PULSE APPLICATIONS

PRODUCT CODE: R76



| Rated Cap. | 400Vdc / 250Vac** | | | | Max dv/dt (V/μs) | Max K ₀ (V ² /μs) | Part Number |
|------------|-------------------|------|------|------|------------------|---|-----------------|
| | B | H | L | p | | | |
| 2700pF | 3.0 | 8.0 | 10.0 | 7.5 | 1700 | 136 E4 | R76MD1270--3-- |
| 3300pF | 3.0 | 8.0 | 10.0 | 7.5 | 1700 | 136 E4 | R76MD1330--3-- |
| 3900pF | 3.0 | 8.0 | 10.0 | 7.5 | 1700 | 136 E4 | R76MD1390--3-- |
| 4700pF | 3.0 | 8.0 | 10.0 | 7.5 | 1700 | 136 E4 | R76MD1470--3-- |
| 5600pF | 3.0 | 8.0 | 10.0 | 7.5 | 1700 | 136 E4 | R76MD1560--3-- |
| 6800pF | 3.5 | 8.5 | 10.5 | 7.5 | 1700 | 136 E4 | R76MD1680--3-- |
| 8200pF | 3.5 | 8.5 | 10.5 | 7.5 | 1700 | 136 E4 | R76MD1820--3-- |
| 0.010μF | 3.5 | 8.5 | 10.5 | 7.5 | 1700 | 136 E4 | R76MD2100--3-- |
| 0.012μF | 4.0 | 9.0 | 10.5 | 7.5 | 1700 | 136 E4 | R76MD2120--3-- |
| 0.015μF | 5.0 | 11.0 | 10.5 | 7.5 | 1700 | 136 E4 | R76MD2150--3-- |
| 0.018μF | 5.0 | 11.0 | 10.5 | 7.5 | 1700 | 136 E4 | R76MD2180--3-- |
| 0.022μF | 6.0 | 12.0 | 10.5 | 7.5 | 1700 | 136 E4 | R76MD2220--3-- |
| 0.027μF | 6.0 | 12.0 | 10.5 | 7.5 | 1700 | 136 E4 | R76MD2270--3-- |
| 0.010μF | 4.0 | 9.0 | 13.0 | 10.0 | 1500 | 120 E4 | R76MF 2100--0-- |
| 0.012μF | 4.0 | 9.0 | 13.0 | 10.0 | 1500 | 120 E4 | R76MF 2120--0-- |
| 0.015μF | 4.0 | 9.0 | 13.0 | 10.0 | 1500 | 120 E4 | R76MF 2150--3-- |
| 0.018μF | 4.0 | 9.0 | 13.0 | 10.0 | 1500 | 120 E4 | R76MF 2180--3-- |
| 0.022μF | 4.0 | 9.0 | 13.0 | 10.0 | 1500 | 120 E4 | R76MF 2220--3-- |
| 0.027μF | 5.0 | 11.0 | 13.0 | 10.0 | 1500 | 120 E4 | R76MF 2270--3-- |
| 0.033μF | 5.0 | 11.0 | 13.0 | 10.0 | 1500 | 120 E4 | R76MF 2330--3-- |
| 0.039μF | 6.0 | 12.0 | 13.0 | 10.0 | 1500 | 120 E4 | R76MF 2390--3-- |
| 0.047μF | 6.0 | 12.0 | 13.0 | 10.0 | 1500 | 120 E4 | R76MF 2470--3-- |
| 0.033μF | 5.0 | 11.0 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 2330--0-- |
| 0.039μF | 5.0 | 11.0 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 2390--3-- |
| 0.047μF | 5.0 | 11.0 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 2470--3-- |
| 0.056μF | 5.0 | 11.0 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 2560--3-- |
| 0.068μF | 6.0 | 12.0 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 2680--3-- |
| 0.082μF | 6.0 | 12.0 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 2820--3-- |
| 0.10μF | 7.5 | 13.5 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 3100--3-- |
| 0.10μF | 9.0 | 12.5 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 3100--7-- |
| 0.12μF | 7.5 | 13.5 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 3120--3-- |
| 0.12μF | 9.0 | 12.5 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 3120--7-- |
| 0.15μF | 8.5 | 14.5 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 3150--3-- |
| 0.15μF | 13.0 | 12.0 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 3150--7-- |
| 0.18μF | 10.0 | 16.0 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 3180--3-- |
| 0.18μF | 13.0 | 12.0 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 3180--7-- |
| 0.22μF | 10.0 | 16.0 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 3220--3-- |
| 0.27μF | 11.0 | 19.0 | 18.0 | 15.0 | 900 | 72 E4 | R76MI 3270--3-- |

| Rated Cap. | 400Vdc / 250Vac** | | | | Max dv/dt (V/μs) | Max K ₀ (V ² /μs) | Part Number |
|------------|-------------------|------|------|------|------------------|---|-----------------|
| | B | H | L | p | | | |
| 0.12μF | 6.0 | 15.0 | 26.5 | 22.5 | 500 | 40 E4 | R76MN 3120--3-- |
| 0.15μF | 6.0 | 15.0 | 26.5 | 22.5 | 500 | 40 E4 | R76MN 3150--3-- |
| 0.18μF | 6.0 | 15.0 | 26.5 | 22.5 | 500 | 40 E4 | R76MN 3180--3-- |
| 0.22μF | 7.0 | 16.0 | 26.5 | 22.5 | 500 | 40 E4 | R76MN 3220--3-- |
| 0.27μF | 8.5 | 17.0 | 26.5 | 22.5 | 500 | 40 E4 | R76MN 3270--3-- |
| 0.33μF | 8.5 | 17.0 | 26.5 | 22.5 | 500 | 40 E4 | R76MN 3330--3-- |
| 0.39μF | 10.0 | 18.5 | 26.5 | 22.5 | 500 | 40 E4 | R76MN 3390--3-- |
| 0.47μF | 10.0 | 18.5 | 26.5 | 22.5 | 500 | 40 E4 | R76MN 3470--3-- |
| 0.56μF | 11.0 | 20.0 | 26.5 | 22.5 | 500 | 40 E4 | R76MN 3560--3-- |
| 0.68μF | 13.0 | 22.0 | 26.5 | 22.5 | 500 | 40 E4 | R76MN 3680--3-- |
| 0.39μF | 9.0 | 17.0 | 32.0 | 27.5 | 300 | 24 E4 | R76MR 3390--3-- |
| 0.47μF | 9.0 | 17.0 | 32.0 | 27.5 | 300 | 24 E4 | R76MR 3470--3-- |
| 0.56μF | 11.0 | 20.0 | 32.0 | 27.5 | 300 | 24 E4 | R76MR 3560--3-- |
| 0.68μF | 11.0 | 20.0 | 32.0 | 27.5 | 300 | 24 E4 | R76MR 3680--3-- |
| 0.82μF | 13.0 | 22.0 | 32.0 | 27.5 | 300 | 24 E4 | R76MR 3820--3-- |
| *1.0μF | 15.0 | 24.5 | 32.0 | 27.5 | 300 | 24 E4 | R76MR 4100--3-- |
| *1.2μF | 15.0 | 24.5 | 32.0 | 27.5 | 300 | 24 E4 | R76MR 4120--3-- |
| *1.5μF | 18.0 | 33.0 | 32.0 | 27.5 | 300 | 24 E4 | R76MR 4150--3-- |
| *1.8μF | 18.0 | 33.0 | 32.0 | 27.5 | 300 | 24 E4 | R76MR 4180--3-- |
| *2.2μF | 22.0 | 37.0 | 32.0 | 27.5 | 300 | 24 E4 | R76MR 4220--3-- |
| *2.7μF | 22.0 | 37.0 | 32.0 | 27.5 | 300 | 24 E4 | R76MR 4270--3-- |
| 3.3μF | 19.0 | 32.0 | 41.5 | 37.5 | 180 | 14 E4 | R76MW4330--3-- |
| 3.9μF | 20.0 | 40.0 | 41.5 | 37.5 | 180 | 14 E4 | R76MW4390--3-- |
| 4.7μF | 20.0 | 40.0 | 41.5 | 37.5 | 180 | 14 E4 | R76MW4470--3-- |
| 5.6μF | 24.0 | 44.0 | 41.5 | 37.5 | 180 | 14 E4 | R76MW4560--3-- |

Mechanical version and packaging (Table 1)

Internal use

Tolerance: H (± 2.5%); J (± 5%); K (± 10%)

Mechanical version and packaging (Table 1)

Internal use

Tolerance: H (± 2.5%); J (± 5%); K (± 10%)

All dimensions are in mm.

Note: If the working voltage (V) is lower than the rated voltage (V_R), the capacitor may work at higher dv/dt. In this case the maximum value allowed is obtained multiplying the above value (see table dv/dt) with the ratio V_R/V. The pulse characteristic K₀ depends on the voltage wave-form and in any case it cannot overcome the value given in the above table.

The dv/dt test is carried out at 2 times the above values.

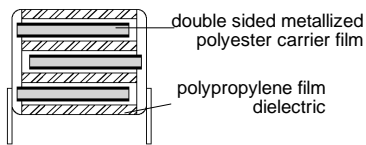
* These values are available in pitch 37.5 mm upon request.

**Not suitable for across-the-line applications. Please refer to Interference Suppression Capacitors (see page 105 of Film Capacitors catalogue 2000 Edition).

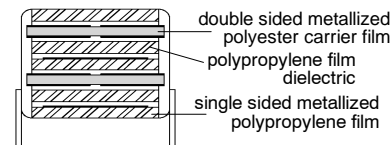
POLYPROPYLENE CAPACITOR WITH DOUBLE SIDED METALLIZED FILM ELECTRODES. D.C. AND PULSE APPLICATIONS

PRODUCT CODE: R76

**1 section
(630Vdc/250Vac)**



**2 sections
(630Vdc/400Vac)**



| Rated Cap. | 630Vdc/250Vac** | | | | Max dv/dt (V/μs) | Max K ₀ (V ² /μs) | Part Number |
|------------|-----------------|------|------|-----|------------------|---|----------------|
| | B | H | L | p | | | |
| 680pF | 3.0 | 8.0 | 10.0 | 7.5 | 2800 | 353 E4 | R76PD0680--0-- |
| 820pF | 3.0 | 8.0 | 10.0 | 7.5 | 2800 | 353 E4 | R76PD0820--0-- |
| 1000pF | 3.0 | 8.0 | 10.0 | 7.5 | 2800 | 353 E4 | R76PD1100--0-- |
| 1200pF | 3.0 | 8.0 | 10.0 | 7.5 | 2800 | 353 E4 | R76PD1120--0-- |
| 1500pF | 3.0 | 8.0 | 10.0 | 7.5 | 2800 | 353 E4 | R76PD1150--0-- |
| 1800pF | 3.0 | 8.0 | 10.0 | 7.5 | 2800 | 353 E4 | R76PD1180--0-- |
| 2200pF | 3.0 | 8.0 | 10.0 | 7.5 | 2800 | 353 E4 | R76PD1220--0-- |
| 2700pF | 3.5 | 8.5 | 10.5 | 7.5 | 2800 | 353 E4 | R76PD1270--3-- |
| 3300pF | 3.5 | 8.5 | 10.5 | 7.5 | 2800 | 355 E4 | R76PD1330--3-- |
| 3900pF | 3.5 | 8.5 | 10.5 | 7.5 | 2800 | 353 E4 | R76PD1390--3-- |
| 4700pF | 4.0 | 9.0 | 10.5 | 7.5 | 2800 | 353 E4 | R76PD1470--3-- |
| 5600pF | 4.0 | 9.0 | 10.5 | 7.5 | 2800 | 353 E4 | R76PD1560--3-- |
| 6800pF | 5.0 | 11.0 | 10.5 | 7.5 | 2800 | 353 E4 | R76PD1680--3-- |
| 8200pF | 5.0 | 11.0 | 10.5 | 7.5 | 2800 | 353 E4 | R76PD1820--3-- |
| 0.010μF | 6.0 | 12.0 | 10.5 | 7.5 | 2800 | 353 E4 | R76PD2100--3-- |
| 0.012μF | 6.0 | 12.0 | 10.5 | 7.5 | 2800 | 353 E4 | R76PD2120--3-- |

Mechanical version and packaging (Table 1)

Internal use

Tolerance: H (± 2.5%) for C ≥ 1000pF; J (± 5%); K (± 10%)

All dimensions are in mm.

Note: If the working voltage (V) is lower than the rated voltage (V_R), the capacitor may work at higher dv/dt. In this case the maximum value allowed is obtained multiplying the above value (see table dv/dt) with the ratio V_R/V. The pulse characteristic K₀ depends on the voltage wave-form and in any case it cannot overcome the value given in the above table. The dv/dt test is carried out at 2 times the above values.

* Not suitable for across-the-line applications. Please refer to Interference Suppression Capacitors.

| Rated Cap. | 630Vdc / 400Vac | | | | Max dv/dt (V/μs) | Max K ₀ (V ² /μs) | Part Number |
|------------|-----------------|------|------|------|------------------|---|-----------------|
| | B | H | L | p | | | |
| 3900pF | 4.0 | 9.0 | 13.0 | 10.0 | 3000 | 378 E4 | R76PF1390--0-- |
| 4700pF | 4.0 | 9.0 | 13.0 | 10.0 | 3000 | 378 E4 | R76PF1470--0-- |
| 5600pF | 4.0 | 9.0 | 13.0 | 10.0 | 3000 | 378 E4 | R76PF1560--0-- |
| 6800pF | 4.0 | 9.0 | 13.0 | 10.0 | 3000 | 378 E4 | R76PF1680--0-- |
| 8200pF | 4.0 | 9.0 | 13.0 | 10.0 | 3000 | 378 E4 | R76PF1820--0-- |
| 0.010μF | 5.0 | 11.0 | 13.0 | 10.0 | 3000 | 378 E4 | R76PF2100--3-- |
| 0.012μF | 5.0 | 11.0 | 13.0 | 10.0 | 3000 | 378 E4 | R76PF2120--3-- |
| 0.015μF | 6.0 | 12.0 | 13.0 | 10.0 | 3000 | 378 E4 | R76PF2150--3-- |
| 0.018μF | 6.0 | 12.0 | 13.0 | 10.0 | 3000 | 378 E4 | R76PF2180--3-- |
| 0.012μF | 5.0 | 11.0 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2120--0-- |
| 0.015μF | 5.0 | 11.0 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2150--0-- |
| 0.018μF | 5.0 | 11.0 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2180--0-- |
| 0.022μF | 5.0 | 11.0 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2220--3-- |
| 0.027μF | 5.0 | 11.0 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2270--3-- |
| 0.033μF | 6.0 | 12.0 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2330--3-- |
| 0.039μF | 6.0 | 12.0 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2390--3-- |
| 0.047μF | 7.5 | 13.5 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2470--3-- |
| 0.047μF | 9.0 | 12.5 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2470--7-- |
| 0.056μF | 7.5 | 13.5 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2560--3-- |
| 0.056μF | 9.0 | 12.5 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2560--7-- |
| 0.068μF | 8.5 | 14.5 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2680--3-- |
| 0.068μF | 9.0 | 12.5 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2680--7-- |
| 0.082μF | 8.5 | 14.5 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2820--3-- |
| 0.082μF | 13.0 | 12.0 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 2820--7-- |
| 0.10μF | 10.0 | 16.0 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 3100--3-- |
| 0.12μF | 11.0 | 19.0 | 18.0 | 15.0 | 2500 | 315 E4 | R76PI 3120--3-- |
| 0.047μF | 6.0 | 15.0 | 26.5 | 22.5 | 1500 | 189 E4 | R76PN 2470--0-- |
| 0.056μF | 6.0 | 15.0 | 26.5 | 22.5 | 1500 | 189 E4 | R76PN 2560--0-- |
| 0.068μF | 6.0 | 15.0 | 26.5 | 22.5 | 1500 | 189 E4 | R76PN 2680--0-- |
| 0.082μF | 6.0 | 15.0 | 26.5 | 22.5 | 1500 | 189 E4 | R76PN 2820--3-- |
| 0.10μF | 6.0 | 15.0 | 26.5 | 22.5 | 1500 | 189 E4 | R76PN 3100--3-- |
| 0.12μF | 7.0 | 16.0 | 26.5 | 22.5 | 1500 | 189 E4 | R76PN 3120--3-- |
| 0.15μF | 8.5 | 17.0 | 26.5 | 22.5 | 1500 | 189 E4 | R76PN 3150--3-- |
| 0.18μF | 8.5 | 17.0 | 26.5 | 22.5 | 1500 | 189 E4 | R76PN 3180--3-- |
| 0.22μF | 10.0 | 18.5 | 26.5 | 22.5 | 1500 | 189 E4 | R76PN 3220--3-- |
| 0.27μF | 11.0 | 20.0 | 26.5 | 22.5 | 1500 | 189 E4 | R76PN 3270--3-- |
| 0.33μF | 11.0 | 20.0 | 26.5 | 22.5 | 1500 | 189 E4 | R76PN 3330--3-- |
| 0.39μF | 13.0 | 22.0 | 26.5 | 22.5 | 1500 | 189 E4 | R76PN 3390--3-- |
| 0.15μF | 9.0 | 17.0 | 32.0 | 27.5 | 900 | 113 E4 | R76PR 3150--3-- |
| 0.18μF | 9.0 | 17.0 | 32.0 | 27.5 | 900 | 113 E4 | R76PR 3180--3-- |
| 0.22μF | 9.0 | 17.0 | 32.0 | 27.5 | 900 | 113 E4 | R76PR 3220--3-- |
| 0.27μF | 9.0 | 17.0 | 32.0 | 27.5 | 900 | 113 E4 | R76PR 3270--3-- |
| *0.33μF | 10.0 | 20.0 | 32.0 | 27.5 | 900 | 113 E4 | R76PR 3330--3-- |
| *0.39μF | 11.0 | 20.0 | 32.0 | 27.5 | 900 | 113 E4 | R76PR 3390--3-- |
| *0.47μF | 13.0 | 22.0 | 32.0 | 27.5 | 900 | 113 E4 | R76PR 3470--3-- |
| *0.56μF | 13.0 | 22.0 | 32.0 | 27.5 | 900 | 113 E4 | R76PR 3560--3-- |
| *0.68μF | 15.0 | 24.5 | 32.0 | 27.5 | 900 | 113 E4 | R76PR 3680--3-- |
| *0.82μF | 14.0 | 28.0 | 32.0 | 27.5 | 900 | 113 E4 | R76PR 3820--3-- |
| *1.0μF | 18.0 | 33.0 | 32.0 | 27.5 | 900 | 113 E4 | R76PR 4100--3-- |
| *1.2μF | 18.0 | 33.0 | 32.0 | 27.5 | 900 | 113 E4 | R76PR 4120--3-- |
| *1.5μF | 22.0 | 37.0 | 32.0 | 27.5 | 900 | 113 E4 | R76PR 4150--3-- |
| *1.8μF | 22.0 | 37.0 | 32.0 | 27.5 | 900 | 113 E4 | R76PR 4180--3-- |
| 2.2μF | 20.0 | 40.0 | 41.5 | 37.5 | 450 | 56 E4 | R76PW4220--3-- |
| 2.7μF | 20.0 | 40.0 | 41.5 | 37.5 | 450 | 56 E4 | R76PW4270--3-- |
| 3.3μF | 24.0 | 44.0 | 41.5 | 37.5 | 450 | 56 E4 | R76PW4330--3-- |

Mechanical version and packaging (Table 1)

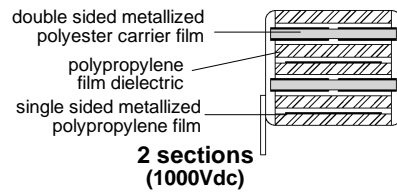
Internal use

Tolerance: H (± 2.5%); J (± 5%); K (± 10%)

POLYPROPYLENE CAPACITOR WITH DOUBLE SIDED METALLIZED FILM ELECTRODES.

D.C. AND PULSE APPLICATIONS

PRODUCT CODE: R76



| Rated Cap. | 1000Vdc / 400Vac | | | | Max dv/dt (V/μs) | Max K ₀ (V ² /μs) | Part Number |
|------------|------------------|------|------|-----|------------------|---|----------------|
| | B | H | L | p | | | |
| 470pF | 3.0 | 8.0 | 10.0 | 7.5 | 6000 | 1200 E4 | R76QD0470--0-- |
| 560pF | 3.0 | 8.0 | 10.0 | 7.5 | 6000 | 1200 E4 | R76QD0560--0-- |
| 680pF | 3.5 | 8.5 | 10.5 | 7.5 | 6000 | 1200 E4 | R76QD0680--0-- |
| 820pF | 3.5 | 8.5 | 10.5 | 7.5 | 6000 | 1200 E4 | R76QD0820--0-- |
| 1000pF | 3.5 | 8.5 | 10.5 | 7.5 | 6000 | 1200 E4 | R76QD1100--0-- |
| 1200pF | 4.0 | 9.0 | 10.5 | 7.5 | 6000 | 1200 E4 | R76QD1120--0-- |
| 1500pF | 5.0 | 11.0 | 10.5 | 7.5 | 6000 | 1200 E4 | R76QD1150--0-- |
| 1800pF | 5.0 | 11.0 | 10.5 | 7.5 | 6000 | 1200 E4 | R76QD1180--0-- |
| 2200pF | 5.0 | 11.0 | 10.5 | 7.5 | 6000 | 1200 E4 | R76QD1220--0-- |
| 2700pF | 6.0 | 12.0 | 10.5 | 7.5 | 6000 | 1200 E4 | R76QD1270--0-- |
| 3300pF | 6.0 | 12.0 | 10.5 | 7.5 | 6000 | 1200 E4 | R76QD1330--0-- |

| Rated Cap. | 1000Vdc / 600Vac | | | | Max dv/dt (V/μs) | Max K ₀ (V ² /μs) | Part Number |
|------------|------------------|------|------|------|------------------|---|-----------------|
| | B | H | L | p | | | |
| 0.027μF | 6.0 | 15.0 | 26.5 | 22.5 | 2100 | 420 E4 | R76QN 2270--0-- |
| 0.033μF | 6.0 | 15.0 | 26.5 | 22.5 | 2100 | 420 E4 | R76QN 2330--3-- |
| 0.039μF | 6.0 | 15.0 | 26.5 | 22.5 | 2100 | 420 E4 | R76QN 2390--3-- |
| 0.047μF | 7.0 | 16.0 | 26.5 | 22.5 | 2100 | 420 E4 | R76QN 2470--3-- |
| 0.056μF | 7.0 | 16.0 | 26.5 | 22.5 | 2100 | 420 E4 | R76QN 2560--3-- |
| 0.068μF | 8.5 | 17.0 | 26.5 | 22.5 | 2100 | 420 E4 | R76QN 2680--3-- |
| 0.082μF | 10.0 | 18.5 | 26.5 | 22.5 | 2100 | 420 E4 | R76QN 2820--3-- |
| 0.10μF | 10.0 | 18.5 | 26.5 | 22.5 | 2100 | 420 E4 | R76QN 3100--3-- |
| 0.12μF | 11.0 | 20.0 | 26.5 | 22.5 | 2100 | 420 E4 | R76QN 3120--3-- |
| 0.15μF | 13.0 | 22.0 | 26.5 | 22.5 | 2100 | 420 E4 | R76QN 3150--3-- |
| 0.10μF | 10.0 | 20.0 | 32.0 | 27.5 | 1000 | 200 E4 | R76QR 3100--3-- |
| 0.12μF | 10.0 | 20.0 | 32.0 | 27.5 | 1000 | 200 E4 | R76QR 3120--3-- |
| 0.15μF | 11.0 | 20.0 | 32.0 | 27.5 | 1000 | 200 E4 | R76QR 3150--3-- |
| *0.18μF | 13.0 | 22.0 | 32.0 | 27.5 | 1000 | 200 E4 | R76QR 3180--3-- |
| *0.22μF | 13.0 | 22.0 | 32.0 | 27.5 | 1000 | 200 E4 | R76QR 3220--3-- |
| *0.27μF | 15.0 | 24.5 | 32.0 | 27.5 | 1000 | 200 E4 | R76QR 3270--3-- |
| *0.33μF | 14.0 | 28.0 | 32.0 | 27.5 | 1000 | 200 E4 | R76QR 3330--3-- |
| *0.39μF | 18.0 | 33.0 | 32.0 | 27.5 | 1000 | 200 E4 | R76QR 3390--3-- |
| *0.47μF | 18.0 | 33.0 | 32.0 | 27.5 | 1000 | 200 E4 | R76QR 3470--3-- |
| *0.56μF | 22.0 | 37.0 | 32.0 | 27.5 | 1000 | 200 E4 | R76QR 3560--3-- |
| *0.68μF | 22.0 | 37.0 | 32.0 | 27.5 | 1000 | 200 E4 | R76QR 3680--3-- |
| 0.82μF | 20.0 | 40.0 | 41.5 | 37.5 | 500 | 100 E4 | R76QW3820--3-- |
| 1.0μF | 20.0 | 40.0 | 41.5 | 37.5 | 500 | 100 E4 | R76QW4100--3-- |
| 1.2μF | 24.0 | 44.0 | 41.5 | 37.5 | 500 | 100 E4 | R76QW4120--3-- |
| 1.5μF | 24.0 | 44.0 | 41.5 | 37.5 | 500 | 100 E4 | R76QW4150--3-- |

Mechanical version and packaging (Table 1)

Internal use

Tolerance: H (±2.5%); J (±5%); K (±10%)

| Rated Cap. | 1000Vdc / 600Vac | | | | Max dv/dt (V/μs) | Max K ₀ (V ² /μs) | Part Number |
|------------|------------------|------|------|------|------------------|---|-----------------|
| | B | H | L | p | | | |
| 1000pF | 4.0 | 9.0 | 13.0 | 10.0 | 4800 | 960 E4 | R76QF1100--0-- |
| 1200pF | 4.0 | 9.0 | 13.0 | 10.0 | 4800 | 960 E4 | R76QF1120--0-- |
| 1500pF | 4.0 | 9.0 | 13.0 | 10.0 | 4800 | 960 E4 | R76QF1150--0-- |
| 1800pF | 4.0 | 9.0 | 13.0 | 10.0 | 4800 | 960 E4 | R76QF1180--0-- |
| 2200pF | 4.0 | 9.0 | 13.0 | 10.0 | 4800 | 960 E4 | R76QF1220--0-- |
| 2700pF | 4.0 | 9.0 | 13.0 | 10.0 | 4800 | 960 E4 | R76QF1270--0-- |
| 3300pF | 4.0 | 9.0 | 13.0 | 10.0 | 4800 | 960 E4 | R76QF1330--3-- |
| 3900pF | 5.0 | 11.0 | 13.0 | 10.0 | 4800 | 960 E4 | R76QF1390--3-- |
| 4700pF | 5.0 | 11.0 | 13.0 | 10.0 | 4800 | 960 E4 | R76QF1470--3-- |
| 5600pF | 6.0 | 12.0 | 13.0 | 10.0 | 4800 | 960 E4 | R76QF1560--3-- |
| 6800pF | 6.0 | 12.0 | 13.0 | 10.0 | 4800 | 960 E4 | R76QF1680--3-- |
| 8200pF | 5.0 | 11.0 | 18.0 | 15.0 | 3300 | 660 E4 | R76QI 1820--0-- |
| 0.010μF | 5.0 | 11.0 | 18.0 | 15.0 | 3300 | 660 E4 | R76QI 2100--3-- |
| 0.012μF | 5.0 | 11.0 | 18.0 | 15.0 | 3300 | 660 E4 | R76QI 2120--3-- |
| 0.015μF | 6.0 | 12.0 | 18.0 | 15.0 | 3300 | 660 E4 | R76QI 2150--3-- |
| 0.018μF | 7.5 | 13.5 | 18.0 | 15.0 | 3300 | 660 E4 | R76QI 2180--0-- |
| 0.022μF | 7.5 | 13.5 | 18.0 | 15.0 | 3300 | 660 E4 | R76QI 2220--3-- |
| 0.022μF | 9.0 | 12.5 | 18.0 | 15.0 | 3300 | 660 E4 | R76QI 2220--7-- |
| 0.027μF | 8.5 | 14.5 | 18.0 | 15.0 | 3300 | 660 E4 | R76QI 2270--3-- |
| 0.027μF | 9.0 | 12.5 | 18.0 | 15.0 | 3300 | 660 E4 | R76QI 2270--7-- |
| 0.033μF | 8.5 | 14.5 | 18.0 | 15.0 | 3300 | 660 E4 | R76QI 2330--3-- |
| 0.033μF | 13.0 | 12.0 | 18.0 | 15.0 | 3300 | 660 E4 | R76QI 2330--7-- |
| 0.039μF | 10.0 | 16.0 | 18.0 | 15.0 | 3300 | 660 E4 | R76QI 2390--3-- |
| 0.047μF | 11.0 | 19.0 | 18.0 | 15.0 | 3300 | 660 E4 | R76QI 2470--3-- |

Mechanical version and packaging (Table 1)

Internal use

Tolerance: H (±2.5%) for C ≥ 1000pF; J (±5%); K (±10%)

All dimensions are in mm.

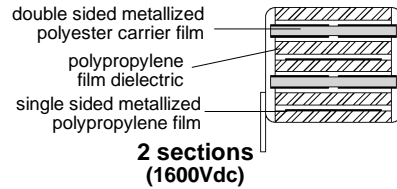
Note: If the working voltage (V) is lower than the rated voltage (V_R), the capacitor may work at higher dv/dt. In this case the maximum value allowed is obtained multiplying the above value (see table dv/dt) with the ratio V_R/V. The pulse characteristic K₀ depends on the voltage wave-form and in any case it cannot overcome the value given in the above table.

The dv/dt test is carried out at 2 times the above values.

* These values are available in pitch 37.5 mm upon request.

POLYPROPYLENE CAPACITOR WITH DOUBLE SIDED METALLIZED FILM ELECTRODES. D.C. AND PULSE APPLICATIONS

PRODUCT CODE: R76



| Rated Cap. | 1600Vdc / 650Vac | | | | Max dv/dt (V/μs) | Max K ₀ (V ² /μs) | Part Number |
|------------|------------------|------|------|------|------------------|---|-----------------|
| | B | H | L | p | | | |
| 3300pF | 5.0 | 11.0 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 1330--3-- |
| 3900pF | 5.0 | 11.0 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 1390--3-- |
| 4700pF | 5.0 | 11.0 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 1470--3-- |
| 5600pF | 5.0 | 11.0 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 1560--3-- |
| 6800pF | 5.0 | 11.0 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 1680--3-- |
| 8200pF | 6.0 | 12.0 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 1820--3-- |
| 0.010μF | 6.0 | 12.0 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 2100--3-- |
| 0.012μF | 7.5 | 13.5 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 2120--3-- |
| 0.012μF | 9.0 | 12.5 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 2120--7-- |
| 0.015μF | 7.5 | 13.5 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 2150--3-- |
| 0.015μF | 9.0 | 12.5 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 2150--7-- |
| 0.018μF | 8.5 | 14.5 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 2180--3-- |
| 0.018μF | 9.0 | 12.5 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 2180--7-- |
| 0.022μF | 8.5 | 14.5 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 2220--3-- |
| 0.022μF | 13.0 | 12.0 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 2220--7-- |
| 0.027μF | 10.0 | 16.0 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 2270--3-- |
| 0.033μF | 11.0 | 19.0 | 18.0 | 15.0 | 6000 | 1900 E4 | R76TI 2330--3-- |
| 0.015μF | 6.0 | 15.0 | 26.5 | 22.5 | 3000 | 960 E4 | R76TN2150--3-- |
| 0.018μF | 6.0 | 15.0 | 26.5 | 22.5 | 3000 | 960 E4 | R76TN2180--3-- |
| 0.022μF | 6.0 | 15.0 | 26.5 | 22.5 | 3000 | 960 E4 | R76TN2220--3-- |
| 0.027μF | 6.0 | 15.0 | 26.5 | 22.5 | 3000 | 960 E4 | R76TN2270--3-- |
| 0.033μF | 7.0 | 16.0 | 26.5 | 22.5 | 3000 | 960 E4 | R76TN2330--3-- |
| 0.039μF | 8.5 | 17.0 | 26.5 | 22.5 | 3000 | 960 E4 | R76TN2390--3-- |
| 0.047μF | 10.0 | 18.5 | 26.5 | 22.5 | 3000 | 960 E4 | R76TN2470--3-- |
| 0.056μF | 10.0 | 18.5 | 26.5 | 22.5 | 3000 | 960 E4 | R76TN2560--3-- |
| 0.068μF | 11.0 | 20.0 | 26.5 | 22.5 | 3000 | 960 E4 | R76TN2680--3-- |
| 0.082μF | 11.0 | 20.0 | 26.5 | 22.5 | 3000 | 960 E4 | R76TN2820--3-- |
| 0.10μF | 13.0 | 22.0 | 26.5 | 22.5 | 3000 | 960 E4 | R76TN3100--3-- |

Mechanical version and packaging (Table 1) _____
Internal use _____
Tolerance: H (± 2.5%); J (± 5%); K (± 10%) _____

| Rated Cap. | 1600Vdc / 650Vac | | | | Max dv/dt (V/μs) | Max K ₀ (V ² /μs) | Part Number |
|------------|------------------|------|------|------|------------------|---|-----------------|
| | B | H | L | p | | | |
| 0.039μF | 9.0 | 17.0 | 32.0 | 27.5 | 2000 | 640 E4 | R76TR 2390--3-- |
| 0.047μF | 9.0 | 17.0 | 32.0 | 27.5 | 2000 | 640 E4 | R76TR 2470--3-- |
| 0.056μF | 9.0 | 17.0 | 32.0 | 27.5 | 2000 | 640 E4 | R76TR 2560--3-- |
| 0.068μF | 9.0 | 17.0 | 32.0 | 27.5 | 2000 | 640 E4 | R76TR 2680--3-- |
| *0.082μF | 11.0 | 20.0 | 32.0 | 27.5 | 2000 | 640 E4 | R76TR 2820--3-- |
| *0.10μF | 11.0 | 20.0 | 32.0 | 27.5 | 2000 | 640 E4 | R76TR 3100--3-- |
| *0.12μF | 13.0 | 22.0 | 32.0 | 27.5 | 2000 | 640 E4 | R76TR 3120--3-- |
| *0.15μF | 15.0 | 24.5 | 32.0 | 27.5 | 2000 | 640 E4 | R76TR 3150--3-- |
| *0.18μF | 15.0 | 24.5 | 32.0 | 27.5 | 2000 | 640 E4 | R76TR 3180--3-- |
| *0.22μF | 18.0 | 33.0 | 32.0 | 27.5 | 2000 | 640 E4 | R76TR 3220--3-- |
| *0.27μF | 18.0 | 33.0 | 32.0 | 27.5 | 2000 | 640 E4 | R76TR 3270--3-- |
| *0.33μF | 18.0 | 33.0 | 32.0 | 27.5 | 2000 | 640 E4 | R76TR 3330--3-- |
| *0.39μF | 22.0 | 37.0 | 32.0 | 27.5 | 2000 | 640 E4 | R76TR 3390--3-- |
| *0.47μF | 22.0 | 37.0 | 32.0 | 27.5 | 2000 | 640 E4 | R76TR 3470--3-- |
| 0.56μF | 20.0 | 40.0 | 41.5 | 37.5 | 1200 | 384 E4 | R76TW3560--3-- |
| 0.68μF | 20.0 | 40.0 | 41.5 | 37.5 | 1200 | 384 E4 | R76TW3680--3-- |
| 0.82μF | 24.0 | 44.0 | 41.5 | 37.5 | 1200 | 384 E4 | R76TW3820--3-- |
| 1.0μF | 24.0 | 44.0 | 41.5 | 37.5 | 1200 | 384 E4 | R76TW4100--3-- |

Mechanical version and packaging (Table 1) _____
Internal use _____
Tolerance: H (± 2.5%); J (± 5%); K (± 10%) _____

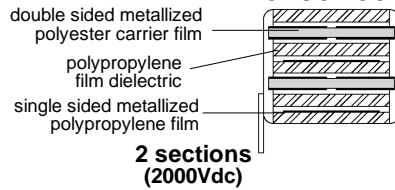
All dimensions are in mm.

Note: If the working voltage (V) is lower than the rated voltage (V_R), the capacitor may work at higher dv/dt. In this case the maximum value allowed is obtained multiplying the above value (see table dv/dt) with the ratio V_R/V. The pulse characteristic K₀ depends on the voltage wave-form and in any case it cannot overcome the value given in the above table. The dv/dt test is carried out at 2 times the above values.

* These values are available in pitch 37.5 mm upon request.

POLYPROPYLENE CAPACITOR WITH DOUBLE SIDED METALLIZED FILM ELECTRODES. D.C. AND PULSE APPLICATIONS

PRODUCT CODE: R76



| Rated Cap. | 2000Vdc / 700Vac | | | | Max dv/dt (V/μs) | Max K ₀ (V ² /μs) | Part Number |
|------------|------------------|------|------|------|------------------|---|-----------------|
| | B | H | L | p | | | |
| 220pF | 5.0 | 11.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 0220--0-- |
| 270pF | 5.0 | 11.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 0270--0-- |
| 330pF | 5.0 | 11.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 0330--0-- |
| 390pF | 5.0 | 11.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 0390--0-- |
| 470pF | 5.0 | 11.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 0470--0-- |
| 560pF | 5.0 | 11.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 0560--0-- |
| 680pF | 5.0 | 11.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 0680--0-- |
| 820pF | 5.0 | 11.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 0820--0-- |
| 1000pF | 5.0 | 11.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1100--3-- |
| 1200pF | 5.0 | 11.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1120--3-- |
| 1500pF | 5.0 | 11.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1150--3-- |
| 1800pF | 5.0 | 11.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1180--3-- |
| 2200pF | 5.0 | 11.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1220--3-- |
| 2700pF | 5.0 | 11.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1270--3-- |
| 3300pF | 6.0 | 12.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1330--3-- |
| 3900pF | 6.0 | 12.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1390--3-- |
| 4700pF | 6.0 | 12.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1470--3-- |
| 5600pF | 7.5 | 13.5 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1560--3-- |
| 5600pF | 9.0 | 12.5 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1560--7-- |
| 6800pF | 7.5 | 13.5 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1680--3-- |
| 6800pF | 9.0 | 12.5 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1680--7-- |
| 8200pF | 8.5 | 14.5 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1820--3-- |
| 8200pF | 9.0 | 12.5 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 1820--7-- |
| 0.010μF | 10.0 | 16.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 2100--3-- |
| 0.010μF | 13.0 | 12.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 2100--7-- |
| 0.012μF | 10.0 | 16.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 2120--3-- |
| 0.015μF | 11.0 | 19.0 | 18.0 | 15.0 | 9500 | 3800 E4 | R76UI 2150--3-- |
| 1000pF | 6.0 | 15.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN1100--0-- |
| 1200pF | 6.0 | 15.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN1120--0-- |
| 1500pF | 6.0 | 15.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN1150--0-- |
| 1800pF | 6.0 | 15.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN1180--0-- |
| 2200pF | 6.0 | 15.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN1220--0-- |
| 2700pF | 6.0 | 15.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN1270--0-- |
| 3300pF | 6.0 | 15.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN1330--0-- |
| 3900pF | 6.0 | 15.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN1390--0-- |
| 4700pF | 6.0 | 15.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN1470--0-- |
| 5600pF | 6.0 | 15.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN1560--0-- |
| 6800pF | 6.0 | 15.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN1680--0-- |
| 8200pF | 6.0 | 15.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN1820--3-- |
| 0.010μF | 6.0 | 15.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN2100--3-- |
| 0.012μF | 6.0 | 15.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN2120--3-- |
| 0.015μF | 7.0 | 16.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN2150--3-- |
| 0.018μF | 7.0 | 16.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN2180--3-- |
| 0.022μF | 8.5 | 17.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN2220--3-- |
| 0.027μF | 10.0 | 18.5 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN2270--3-- |
| 0.033μF | 10.0 | 18.5 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN2330--3-- |
| 0.039μF | 11.0 | 20.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN2390--3-- |
| 0.047μF | 13.0 | 22.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN2470--3-- |
| 0.056μF | 13.0 | 22.0 | 26.5 | 22.5 | 3500 | 1400 E4 | R76UN2560--3-- |

| Rated Cap. | 2000Vdc / 700Vac | | | | Max dv/dt (V/μs) | Max K ₀ (V ² /μs) | Part Number |
|------------|------------------|------|------|------|------------------|---|-----------------|
| | B | H | L | p | | | |
| 0.022μF | 9.0 | 17.0 | 32.0 | 27.5 | 2300 | 920 E4 | R76UR 2220--3-- |
| 0.027μF | 9.0 | 17.0 | 32.0 | 27.5 | 2300 | 920 E4 | R76UR 2270--3-- |
| *0.033μF | 9.0 | 17.0 | 32.0 | 27.5 | 2300 | 920 E4 | R76UR 2330--3-- |
| *0.039μF | 10.0 | 20.0 | 32.0 | 27.5 | 2300 | 920 E4 | R76UR 2390--3-- |
| *0.047μF | 11.0 | 20.0 | 32.0 | 27.5 | 2300 | 920 E4 | R76UR 2470--3-- |
| *0.056μF | 13.0 | 22.0 | 32.0 | 27.5 | 2300 | 920 E4 | R76UR 2560--3-- |
| *0.068μF | 13.0 | 22.0 | 32.0 | 27.5 | 2300 | 920 E4 | R76UR 2680--3-- |
| *0.082μF | 15.0 | 24.5 | 32.0 | 27.5 | 2300 | 920 E4 | R76UR 2820--3-- |
| *0.10μF | 14.0 | 28.0 | 32.0 | 27.5 | 2300 | 920 E4 | R76UR 3100--3-- |
| *0.12μF | 18.0 | 33.0 | 32.0 | 27.5 | 2300 | 920 E4 | R76UR 3120--3-- |
| *0.15μF | 18.0 | 33.0 | 32.0 | 27.5 | 2300 | 920 E4 | R76UR 3150--3-- |
| *0.18μF | 22.0 | 37.0 | 32.0 | 27.5 | 2300 | 920 E4 | R76UR 3180--3-- |
| *0.22μF | 22.0 | 37.0 | 32.0 | 27.5 | 2300 | 920 E4 | R76UR 3220--3-- |
| 0.27μF | 20.0 | 40.0 | 41.5 | 37.5 | 1500 | 600 E4 | R76UW3270--3-- |
| 0.33μF | 20.0 | 40.0 | 41.5 | 37.5 | 1500 | 600 E4 | R76UW3330--3-- |
| 0.39μF | 24.0 | 44.0 | 41.5 | 37.5 | 1500 | 600 E4 | R76UW3390--3-- |
| 0.47μF | 24.0 | 44.0 | 41.5 | 37.5 | 1500 | 600 E4 | R76UW3470--3-- |

Mechanical version and packaging (Table 1)

Internal use

Tolerance: H (± 2.5%); J (± 5%); K (± 10%)

All dimensions are in mm.

Note: If the working voltage (V) is lower than the rated voltage (V_R), the capacitor may work at higher dv/dt. In this case the maximum value allowed is obtained multiplying the above value (see table dv/dt) with the ratio V_R/V. The pulse characteristic K₀ depends on the voltage waveform and in any case it cannot overcome the value given in the above table. The dv/dt test is carried out at 2 times the above values.

* These values are available in pitch 37.5 mm upon request.

Mechanical version and packaging (Table 1)

Internal use

Tolerance: H (± 2.5%); J (± 5%); K (± 10%)

POLYPROPYLENE CAPACITOR WITH DOUBLE SIDED METALLIZED FILM ELECTRODES D.C. AND PULSE APPLICATIONS

PRODUCT CODE: R76

ELECTRICAL CHARACTERISTICS

Rated voltage (V_R):

250Vdc - 400Vdc - 630Vdc for 1 section
630Vdc - 1000Vdc - 1600Vdc - 2000Vdc for 2 sections.

Rated temperature (T_R):

+85°C for V_R (d.c.)
+75°C for V_R (a.c.)

Temperature derated voltage:

The following decreasing factor has to be applied on the rated voltage:

+85°C to +105°C: 1.25% per °C for V_R (d.c.)
+75°C to +105°C: 1.35% per °C for V_R (a.c.)

Capacitance range:

680pF to 10µF 1 section
220pF to 3.3µF 2 sections

Capacitance values:

E12 series (IEC 60063 Norm).

Capacitance tolerances (measured at 1 kHz):

±5% (J); ±10% (K) for C < 1000pF
±2.5% (H); ±5% (J); ±10% (K) for C ≥ 1000pF

Total self-inductance (L):

(Lead length ~2 mm)

| | | | | | | |
|------------|-----|----|----|------|------|------|
| Pitch (mm) | 7.5 | 10 | 15 | 22.5 | 27.5 | 37.5 |
| L (nH) ≈ | 8 | 9 | 10 | 18 | 18 | 20 |

Dissipation factor (DF):

tgδ × 10⁻⁴ at +25°C ± 5°C

| kHz | C ≤ 0.1µF | 0.1µF < C ≤ 1.0µF | C > 1µF |
|-----|-----------|-------------------|---------|
| 1 | ≤ 3 | ≤ 3 | ≤ 4 |
| 10 | ≤ 4 | ≤ 6 | |
| 100 | ≤ 15 | | |

Insulation resistance:

Test conditions

Temperature: +25°C ± 5°C
Voltage charge time: 1 min
Voltage charge: 100Vdc

Performance

≥ 1 × 10⁵ MΩ for C ≤ 0.33µF (5 × 10⁵ MΩ)*
≥ 30000 s for C > 0.33µF (150000 s)*
* Typical value.

Test voltage between terminations:

1.6 × V_R applied for 2 s at +25°C ± 5°C

TEST METHOD AND PERFORMANCE

Damp heat, steady state:

Test conditions

Temperature: +40°C ± 2°C
Relative humidity (RH): 93% ± 2%
Test duration: 56 days

Performance

Capacitance change |ΔC/C|: ≤ 2%
DF change (Δtgδ): ≤ 10 × 10⁻⁴ at 1kHz
Insulation resistance: ≥ 50% of initial limit.

Endurance:

Test conditions

Temperature: +85°C ± 2°C
Test duration: 2000 h
Voltage applied: 1.25 × V_R (d.c.)

Performance

Capacitance change |ΔC/C|: ≤ 2%
DF change (Δtgδ): ≤ 10 × 10⁻⁴ at 10kHz for C ≤ 1µF
≤ 10 × 10⁻⁴ at 1kHz for C > 1µF
Insulation resistance: ≥ 50% of initial limit.

Resistance to soldering heat:

Test conditions

Solder bath temperature: +260°C ± 5°C
Dipping time (with heat screen): 10 s ± 1 s

Performance

Capacitance change |ΔC/C|: ≤ 1%
DF change (Δtgδ): ≤ 10 × 10⁻⁴ at 10kHz for C ≤ 1µF
≤ 10 × 10⁻⁴ at 1kHz for C > 1µF
Insulation resistance: ≥ initial limit.

Long term stability (after two years):

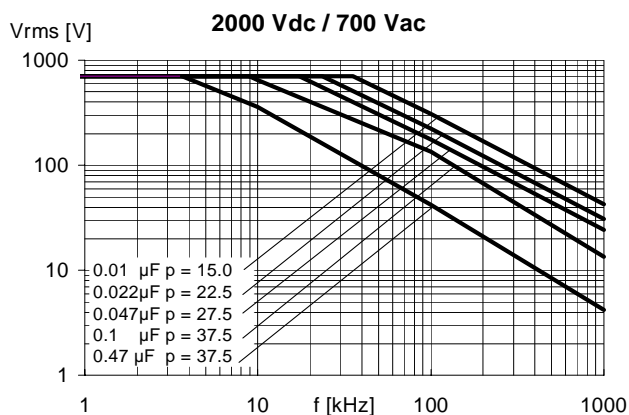
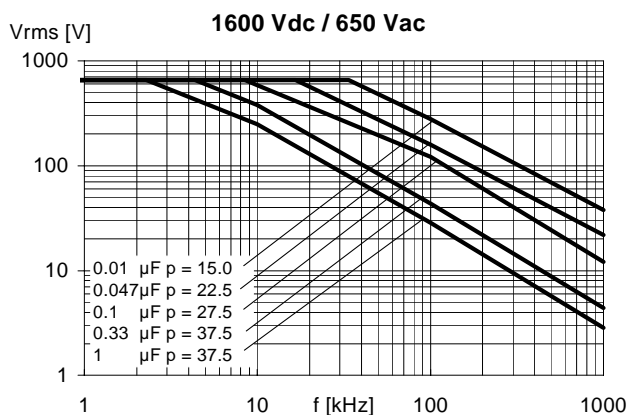
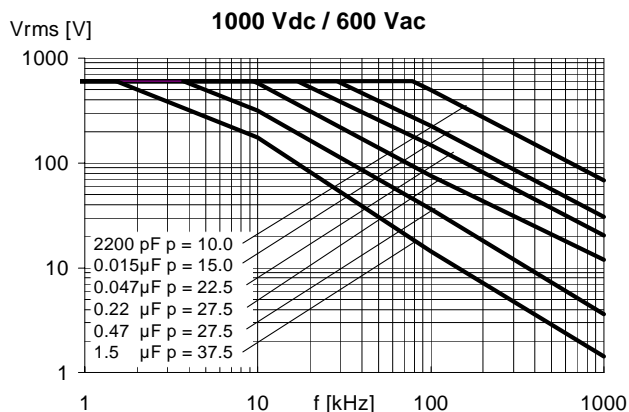
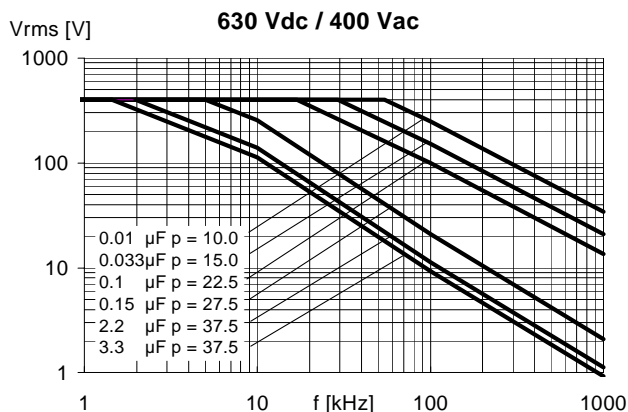
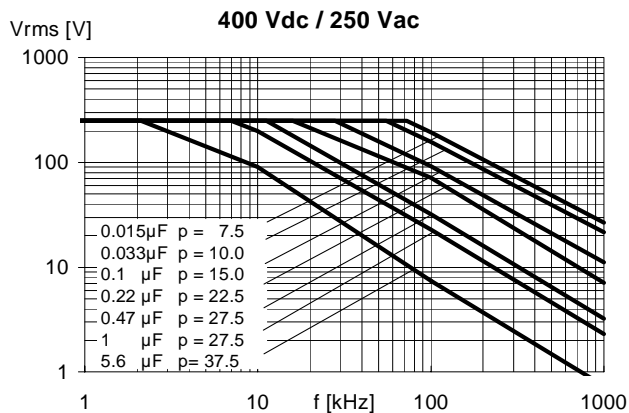
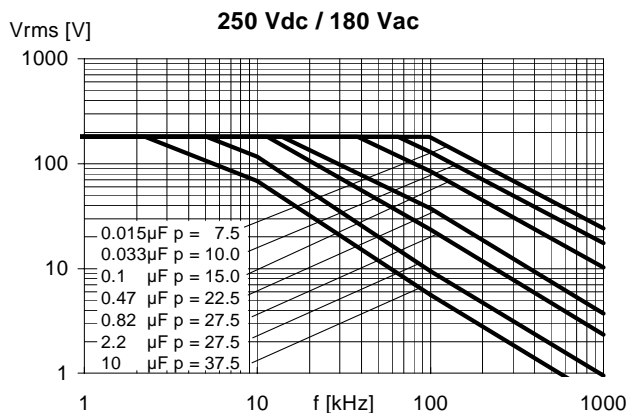
Storage: standard environmental conditions.

Performance

Capacitance change |ΔC/C|: ≤ 0.5%

MMKP Series
**POLYPROPYLENE CAPACITOR WITH DOUBLE
 SIDED METALLIZED FILM ELECTRODES
 D.C. AND PULSE APPLICATIONS**

MAX. VOLTAGE (Vr.m.s.) VERSUS FREQUENCY (sinusoidal wave-form / $T_h \leq 40^\circ\text{C}$)



Note: p (pitch) in mm.