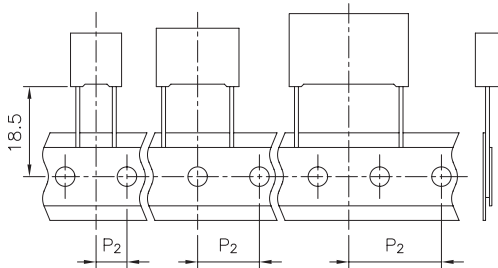
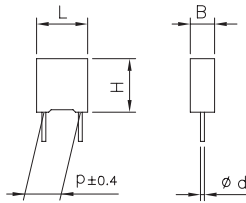


## METALLIZED POLYPROPYLENE FILM CAPACITOR

**Typical applications:** This special release is specifically designed for application in series with the main (Capacitive power supply), with particular protection against severe ambient conditions.

### BEST FITTING COMPONENTS IN TERMS OF BOTH SIZE & PERFORMANCES

PRODUCT CODE: **R752 (Digit 12: 0 to 9)**  
**R75L Digit 12: 0 to 9)**



Ød±0.05	15≤p≤27.5	p = 37.5
	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	5										-	

- Digit 1 to 3 Series code.
- Digit 4 a.c. rated voltage:  
2 = 230V L = 250V
- Digit 5 Pitch:  
I=15mm; N= 22.5 mm;  
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 (0 to 9).
- Digit 13 Internal use.
- Digit 14 Capacitance tolerance: K=10%; M=20%  
Tolerance ± 5% (J) available upon request

Table 1

Standard packaging style	Lead length (mm)	Taping style			Ordering code (Digit 10 to 11)
		P <sub>2</sub> (mm)	Fig. (No.)	Pitch (mm)	
AMMO-PACK		12.70	2	15.0	DQ
AMMO-PACK		19.05	3	22.5	DQ
REEL Ø 355mm		12.70	2	15.0	GY
REEL Ø 500mm		12.70	2	15.0	CK
REEL Ø 500mm		19.05	3	22.5/27.5	CK
Loose, short leads	4 <sup>+2</sup>				AA
Loose, long leads (p≥15mm)	30 <sup>+5</sup>				40
	25 <sup>+2/-1</sup>				50

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

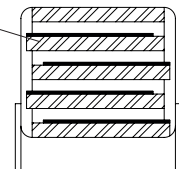
Pitch (mm)	Box thickness (mm)	Maximum dimensions (mm)		
		B max	H max	L max
15.0	<7.5	B +0.2	H +0.1	L +0.3
15.0	≥7.5	B +0.2	H +0.1	L +0.5
22.5	All	B +0.2	H +0.1	L +0.3
27.5	All	B +0.2	H +0.1	L +0.3
37.5	All	B +0.3	H +0.1	L +0.3

### GENERAL TECHNICAL DATA

- Dielectric:** polypropylene film.
- Plates:** aluminium layer deposited by evaporation under vacuum.
- Winding:** non-inductive type.
- Leads:** tinned wire.
- Protection:** plastic case, thermosetting resin filled.  
Box material is solvent resistant and flame retardant according to UL94 V0.
- Marking:** manufacturer's logo, series (R75), dielectric code (MKP), capacitance, tolerance, A.C. rated voltage, manufacturing date code.
- Climatic category:** 55/105/56 IEC 60068-1
- Operating temperature range:** -55 to +105°C
- Related documents:** IEC 60384-16

### Winding scheme

single sided metallized polypropylene film



## METALLIZED POLYPROPYLENE FILM CAPACITOR

PRODUCT CODE: **R752 (Digit 12: 0 to 9)**  
**R75L (Digit 12: 0 to 9)**

Rated Cap.	230Vac / 400Vdc* Std dimensions				Max dv/dt (V/μs)	Max K <sub>0</sub> (V <sup>2</sup> /μs)	Part Number
	B	H	L	p			
0.033 μF	4.0	9.0	13.0	10.0	1000	800 E3	R752F 2330--0--
0.100 μF	6.0	12.0	13.0	10.0	1000	800 E3	R752F 3100--0--
0.082 μF	5.0	11.0	18.0	15.0	700	560 E3	R752I 2820--0--
0.10 μF	5.0	11.0	18.0	15.0	700	560 E3	R752I 3100--0--
0.15 μF	6.0	12.0	18.0	15.0	700	560 E3	R752I 3150--0--
0.18 μF	6.0	12.0	18.0	15.0	700	560 E3	R752I 3180--0--
0.22 μF	7.5	13.5	18.0	15.0	700	560 E3	R752I 3220--0--
0.27 μF	8.5	14.5	18.0	15.0	700	560 E3	R752I 3270--0--
0.33 μF	8.5	14.5	18.0	15.0	700	560 E3	R752I 3330--0--
0.47 μF	10.0	16.0	18.0	15.0	700	560 E3	R752I 3470--0--
0.27 μF	6.0	15.0	26.5	22.5	250	200 E3	R752N 3270--0--
0.33 μF	6.0	15.0	26.5	22.5	250	200 E3	R752N 3330--0--
0.47 μF	7.0	16.0	26.5	22.5	250	200 E3	R752N 3470--0--
0.56 μF	8.5	17.0	26.5	22.5	250	200 E3	R752N 3560--0--
0.68 μF	10.0	18.5	26.5	22.5	250	200 E3	R752N 3680--0--
0.82 μF	10.0	18.5	26.5	22.5	250	200 E3	R752N 3820--0--
1.0 μF	11.0	20.0	26.5	22.5	250	200 E3	R752N 4100--0--
1.5 μF	13.0	22.0	26.5	22.5	250	200 E3	R752N 4150--0--
0.47 μF	9.0	17.0	32.0	27.5	130	104 E3	R752R 3470--0--
0.56 μF	9.0	17.0	32.0	27.5	130	104 E3	R752R 3560--0--
0.68 μF	9.0	17.0	32.0	27.5	130	104 E3	R752R 3680--0--
0.82 μF	9.0	17.0	32.0	27.5	130	104 E3	R752R 3820--0--
1.0 μF	11.0	20.0	32.0	27.5	130	104 E3	R752R 4100--0--
1.2 μF	11.0	20.0	32.0	27.5	130	104 E3	R752R 4120--0--
1.5 μF	13.0	22.0	32.0	27.5	130	104 E3	R752R 4150--0--
1.8 μF	13.0	22.0	32.0	27.5	130	104 E3	R752R 4180--0--
2.2 μF	14.0	28.0	32.0	27.5	130	104 E3	R752R 4220--0--
2.7 μF	18.0	33.0	32.0	27.5	130	104 E3	R752R 4270--0--
3.3 μF	18.0	33.0	32.0	27.5	130	104 E3	R752R 4330--0--
3.9 μF	18.0	33.0	32.0	27.5	130	104 E3	R752R 4390--0--
4.7 μF	22.0	37.0	32.0	27.5	130	104 E3	R752R 4470--0--
1.8 μF	11.0	22.0	41.5	37.5	70	56 E3	R752W4180--0--
2.2 μF	13.0	24.0	41.5	37.5	70	56 E3	R752W4220--0--
2.7 μF	13.0	24.0	41.5	37.5	70	56 E3	R752W4270--0--
3.3 μF	16.0	28.5	41.5	37.5	70	56 E3	R752W4330--0--
3.9 μF	16.0	28.5	41.5	37.5	70	56 E3	R752W4390--0--
4.7 μF	19.0	32.0	41.5	37.5	70	56 E3	R752W4470--0--
5.6 μF	19.0	32.0	41.5	37.5	70	56 E3	R752W4560--0--
6.8 μF	20.0	40.0	41.5	37.5	70	56 E3	R752W4680--0--

Mechanical version and packaging (Table1) \_\_\_\_\_  
 Internal use \_\_\_\_\_  
 Tolerance: K (±10%); M (±20%) \_\_\_\_\_

All dimensions are in mm

Rated Cap.	250Vac / 560Vdc* Std dimensions				Max dv/dt (V/μs)	Max K <sub>0</sub> (V <sup>2</sup> /μs)	Part Number
	B	H	L	p			
0.010 μF	4.0	9.0	13.0	10.0	1500	168 E4	R75LF 2100--0--
0.015 μF	4.0	9.0	13.0	10.0	1500	168 E4	R75LF 2150--0--
0.022 μF	4.0	9.0	13.0	10.0	1500	168 E4	R75LF 2220--0--
0.033 μF	5.0	11.0	13.0	10.0	1500	168 E4	R75LF 2330--0--
0.047 μF	5.0	11.0	13.0	10.0	1500	168 E4	R75LF 2470--0--
0.068 μF	6.0	12.0	13.0	10.0	1500	168 E4	R75LF 2680--0--
0.056 μF	5.0	11.0	18.0	15.0	900	101 E4	R75LI 2560--0--
0.068 μF	5.0	11.0	18.0	15.0	900	101 E4	R75LI 2680--0--
0.082 μF	5.0	11.0	18.0	15.0	900	101 E4	R75LI 2820--0--
0.10 μF	6.0	12.0	18.0	15.0	900	101 E4	R75LI 3100--0--
0.15 μF	7.5	13.5	18.0	15.0	900	101 E4	R75LI 3150--0--
0.18 μF	7.5	13.5	18.0	15.0	900	101 E4	R75LI 3180--0--
0.22 μF	8.5	14.5	18.0	15.0	900	101 E4	R75LI 3220--0--
0.27 μF	10.0	16.0	18.0	15.0	900	101 E4	R75LI 3270--0--
0.33 μF	10.0	16.0	18.0	15.0	900	101 E4	R75LI 3330--0--
0.22 μF	6.0	15.0	26.5	22.5	300	336 E3	R75LN 3220--0--
0.27 μF	6.0	15.0	26.5	22.5	300	336 E3	R75LN 3270--0--
0.33 μF	7.0	16.0	26.5	22.5	300	336 E3	R75LN 3330--0--
0.47 μF	8.5	17.0	26.5	22.5	300	336 E3	R75LN 3470--0--
0.56 μF	10.0	18.5	26.5	22.5	300	336 E3	R75LN 3560--0--
0.68 μF	11.0	20.0	26.5	22.5	300	336 E3	R75LN 3680--0--
0.82 μF	11.0	20.0	26.5	22.5	300	336 E3	R75LN 3820--0--
1.0 μF	13.0	22.0	26.5	22.5	300	336 E3	R75LN 4100--0--
0.33 μF	9.0	17.0	32.0	27.5	150	168 E3	R75LR 3330--0--
0.39 μF	9.0	17.0	32.0	27.5	150	168 E3	R75LR 3390--0--
0.47 μF	9.0	17.0	32.0	27.5	150	168 E3	R75LR 3470--0--
0.56 μF	9.0	17.0	32.0	27.5	150	168 E3	R75LR 3560--0--
0.68 μF	11.0	20.0	32.0	27.5	150	168 E3	R75LR 3680--0--
0.82 μF	11.0	20.0	32.0	27.5	150	168 E3	R75LR 3820--0--
1.0 μF	13.0	22.0	32.0	27.5	150	168 E3	R75LR 4100--0--
1.2 μF	13.0	22.0	32.0	27.5	150	168 E3	R75LR 4120--0--
1.5 μF	13.0	25.0	32.0	27.5	150	168 E3	R75LR 4150--0--
1.8 μF	18.0	33.0	32.0	27.5	150	168 E3	R75LR 4180--0--
2.2 μF	18.0	33.0	32.0	27.5	150	168 E3	R75LR 4220--0--
2.7 μF	18.0	33.0	32.0	27.5	150	168 E3	R75LR 4270--0--
3.3 μF	22.0	37.0	32.0	27.5	150	168 E3	R75LR 4330--0--
3.9 μF	22.0	37.0	32.0	27.5	150	168 E3	R75LR 4390--0--
1.2 μF	11.0	22.0	41.5	37.5	90	101 E3	R75LW 4120--0--
1.5 μF	13.0	24.0	41.5	37.5	90	101 E3	R75LW 4150--0--
1.8 μF	13.0	24.0	41.5	37.5	90	101 E3	R75LW 4180--0--
2.2 μF	16.0	28.5	41.5	37.5	90	101 E3	R75LW 4220--0--
2.7 μF	16.0	28.5	41.5	37.5	90	101 E3	R75LW 4270--0--
3.3 μF	19.0	32.0	41.5	37.5	90	101 E3	R75LW 4330--0--
3.9 μF	19.0	32.0	41.5	37.5	90	101 E3	R75LW 4390--0--
4.7 μF	20.0	40.0	41.5	37.5	90	101 E3	R75LW 4470--0--
5.6 μF	20.0	40.0	41.5	37.5	90	101 E3	R75LW 4560--0--
6.8 μF	24.0	44.0	41.5	37.5	90	101 E3	R75LW 4680--0--
8.2 μF	24.0	44.0	41.5	37.5	90	101 E3	R75LW 4820--0--
10.0 μF	30.0	45.0	41.5	37.5	90	101 E3	R75LW 5100--0--

Mechanical version and packaging (Table1) \_\_\_\_\_  
 Internal use \_\_\_\_\_  
 Tolerance: K (±10%); M (±20%) \_\_\_\_\_

E12 Series available upon request

Note: If the working voltage (V) is lower than the rated voltage (V<sub>R</sub>), 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<sub>R</sub>/V.

The pulse characteristic K<sub>0</sub> 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 EMI filtering applications.

## METALLIZED POLYPROPYLENE FILM CAPACITOR

PRODUCT CODE: **R752 (Digit 12: 0 to 9)**  
**R75L (Digit 12: 0 to 9)**

### ELECTRICAL CHARACTERISTICS

**Rated voltage ( $V_R$ ):** 230Vac (400Vdc) - 250Vac (560Vdc)

**Rated temperature ( $T_R$ ):** +85°C

**Temperature derated voltage:**

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

+85°C to +105°C: 2.00% per °C for  $V_R$  (d.c.)

+85°C to +105°C: 0.5% per °C for  $V_R$  (a.c.)

**Capacitance range:** 0.056  $\mu$ F to 10  $\mu$ F.

**Capacitance values:**

E12 series (IEC 60063 Norm).

**Capacitance tolerances** (measured at 1 kHz):

$\pm 10\%$  (K);  $\pm 20\%$  (M).

**Total self-inductance (L):** (Lead length ~2 mm)

Pitch (mm)	15	22.5	27.5	37.5
L (nH) $\approx$	10	18	18	20

**Dissipation factor (DF):**

$\text{tg}\delta \times 10^{-4}$  at +25°C  $\pm 5^\circ$ C

kHz	$C \leq 0.1 \mu\text{F}$	$0.1 < C \leq 1.0 \mu\text{F}$	$1 < C \leq 3.3 \mu\text{F}$	$3.3 < C \leq 10 \mu\text{F}$
1	$\leq 4$	$\leq 5$	$\leq 6$	$\leq 10$
10	$\leq 6$	$\leq 8$		
100	$\leq 25$			

**Insulation resistance:**

**Test conditions**

Temperature: +25°C  $\pm 5^\circ$ C

Voltage charge time: 1min

Voltage charge: 100Vdc

**Performance**

$\geq 1 \times 10^5 \text{ M}\Omega$  for  $C \leq 0.33 \mu\text{F}$  ( $5 \times 10^5 \text{ M}\Omega$ )\*

$\geq 30000 \text{ s}$  for  $C > 0.33 \mu\text{F}$  (150000 s)\*

\* Typical value.

**Test voltage between terminations:**

$1.6 \times V_R$  applied for 2 s at +25°C  $\pm 5^\circ$ C

**Surge test:**

1500 Vpk (10 pulses) for 230Vac

1700 Vpk (10 pulses) for 250Vac

### TEST METHOD AND PERFORMANCE

**Damp heat, steady state:**

**Test conditions 1st**

Temperature: +40°C  $\pm 2^\circ$ C

Relative humidity (RH): 93%  $\pm 2\%$

Test duration: 56 days

**Performance**

Capacitance change  $|\Delta C/C|$ :  $\leq 2\%$

DF change ( $\Delta \text{tg}\delta$ ):  $\leq 10 \times 10^{-4}$  at 1kHz

Insulation resistance:  $\geq 50\%$  of initial limit.

**Test conditions 2nd**

Temperature: +40°C  $\pm 2^\circ$ C

Relative humidity (RH): 93%  $\pm 2\%$

Test duration: 56 days

Voltage applied:  $V_R$

**Performance**

Capacitance change  $|\Delta C/C|$ :  $\leq 5\%$

DF change ( $\Delta \text{tg}\delta$ ):  $\leq 10 \times 10^{-4}$  at 1kHz

Insulation resistance:  $\geq 50\%$  of initial limit.

**Test conditions 3rd**

Temperature: +85°C  $\pm 2^\circ$ C

Relative humidity (RH): 85%  $\pm 2\%$

Test duration: 250 h

Voltage applied:  $V_R$

**Performance**

Capacitance change  $|\Delta C/C|$ :  $\leq 5\%$

DF change ( $\Delta \text{tg}\delta$ ):  $\leq 10 \times 10^{-4}$  at 1kHz

Insulation resistance:  $\geq 50\%$  of initial limit.

**Endurance:**

**Test conditions**

Temperature: +85°C  $\pm 2^\circ$ C

Test duration: 2000 h

Voltage applied:  $1.25 \times V_R$

**Performance**

Capacitance change  $|\Delta C/C|$ :  $\leq 5\%$

DF change ( $\Delta \text{tg}\delta$ ):  $\leq 10 \times 10^{-4}$  at 10kHz for  $C \leq 1 \mu\text{F}$

$\leq 10 \times 10^{-4}$  at 1kHz for  $C > 1 \mu\text{F}$

Insulation resistance:  $\geq 50\%$  of initial limit.

**Resistance to soldering heat:**

**Test conditions**

Solder bath temperature: +260°C  $\pm 5^\circ$ C

Dipping time (with heat screen): 10 s  $\pm 1$  s

**Performance**

Capacitance change  $|\Delta C/C|$ :  $\leq 1\%$

DF change ( $\Delta \text{tg}\delta$ ):  $\leq 10 \times 10^{-4}$  at 10kHz for  $C \leq 1 \mu\text{F}$

$\leq 10 \times 10^{-4}$  at 1kHz for  $C > 1 \mu\text{F}$

Insulation resistance:  $\geq$  initial limit.

**Long term stability** (after two years):

**Storage:** standard environmental conditions (see page 12 of DC film capacitors catalogue)

**Performance**

Capacitance change  $|\Delta C/C|$ :  $\leq 0.5\%$

单击下面可查看定价，库存，交付和生命周期等信息

[>>KEMET\(基美\)](#)