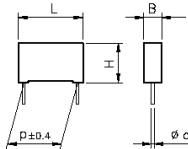
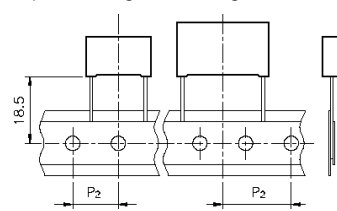


Loose



Taped



Y2 / X1 CLASS (EN132400) MKP (300Vac) / MKT (250Vac) Series METALLIZED POLYESTER AND POLYPROPYLENE FILM CAPACITOR

SELF-HEALING PROPERTIES

Typical applications: Interference suppression and «across-the-line» and «line to ground» applications. Suitable for use in situations where failure of the capacitor could lead to danger of electric shock.

PRODUCT CODE: **R41**

Ø d ±0.05	p = 10	p = 15		15 < p ≤ 27.5	p = 37.5
	0.6	0.8 (250Vac)	0.6 (300Vac)	0.8	1

All dimensions are in mm.

GENERAL TECHNICAL DATA

Dielectric: polyester film (PET) for 250 Vac,
polypropylene film for 300Vac

Plates: metal layer deposited by evaporation under vacuum.

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, capacitance, tolerance, rated voltage, capacitor class, dielectric code, climatic category, passive flammability category, manufacturing date code, approvals, manufacturing plant.

Climatic category: 40/110/56 IEC 60068-1

Operating temperature range: -40 to +110°C

Related documents: IEC 60384-14 2nd edition 1993,
+ amendment A1: 1995; EN132400.

ELECTRICAL CHARACTERISTICS

Rated voltage (V_R): 250Vac and 300Vac; 50/60Hz

Capacitance range: 0.001µF to 0.1µF (250Vac)
0.001µF to 1.0µF (300Vac)

Capacitance values: E6 series (IEC 60063 Norm).

Capacitance tolerances (measured at 1 kHz):

± 10% (K); ± 20% (M).

Dissipation factor (DF):

$tg\delta \times 10^{-4}$ at +25°C ± 5°C: ≤ 100 (60)* at 1kHz (250Vac)
≤ 10 (6)* at 1kHz (300Vac)

* Typical value

Insulation resistance:

Test conditions

Temperature: +25°C ± 5°C

Voltage charge time: 1 min

Voltage charge: 100 Vdc

Performance

≥ 3 × 10⁴ MΩ (5 × 10⁴ MΩ)* (250Vac)

≥ 1 × 10⁵ MΩ (5 × 10⁵ MΩ)* for C ≤ 0.33µF (300Vac)

≥ 30000 s (150000 s)* for C > 0.33µF (300Vac)

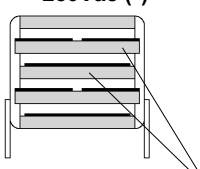
* Typical value

Test voltage between terminations (on all pieces):

2500Vac for 1 s + 5000Vdc for 1 s at +25°C ± 5°C

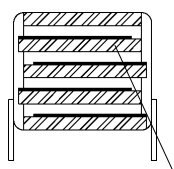
Winding scheme

250Vac (*)



single sided metallized
polyester film

300Vac **NEW**



single sided metallized
polypropylene film

TEST METHOD AND PERFORMANCE

Damp heat, steady state:

Test conditions

Temperature: +40 ± 2°C

Relative humidity (RH): 93 ± 2%

Test duration: 56 days

Performance

Dielectric strength: no dielectric breakdown or
flashover at 1500Vac/1 min

Capacitance change |ΔC/C|: ≤ 5%

Insulation resistance: ≥ 50% of initial limit.

Endurance:

Test conditions

Temperature: 110°C ± 2°C

Test duration: 1000 h

Voltage applied: 1.7 × V_R + 1000Vac 0.1 s/h

Performance

Dielectric strength: no dielectric breakdown or
flashover at 1500Vac/1 min

Capacitance change |ΔC/C|: ≤ 10%

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|: ≤ 2%

APPROVALS

	ENEC-IMQ EN 132400	Class Y2 / X1	File No. V4160
	CB		File No. IT-1409
	CSA C22.2 N°1	Across-the-line or line-to-ground	File No. LR83890
	UL 1414	Across-the-line or line-to-ground	File No. E 97797
	CCEE IEC60384-14	Class Y2 / X1	File No. CH0045034-2000

Approved according to EN132400 (IEC 60384-14 2nd ed.
1993 plus Amendment A1: 1995).

According to IEC 60065.

(*) ENEC mark has replaced all the following European
National marks:



(*) For new designs we suggest the use of the 300Vac version

Y2 / X1 CLASS (EN132400)
MKP (300Vac) / MKT (250Vac) Series
**METALLIZED POLYESTER AND
POLYPROPYLENE FILM CAPACITOR**

SELF-HEALING PROPERTIES

Typical applications: Interference suppression and «across-the-line» and «line to ground» applications. Suitable for use in situations where failure of the capacitor could lead to danger of electric shock.

PRODUCT CODE: **R41**

NEW

Rated Cap.	250 Vac				Max dv/dt at 350Vdc (V/ μ s)	Part Number
	B	H	L	p		
1000 pF	4.0	9.0	13.0	10.0	500	R41.LF.1100.-.-00.-
1500 pF	4.0	9.0	13.0	10.0	500	R41.LF.1150.-.-00.-
2200 pF	4.0	9.0	13.0	10.0	500	R41.LF.1220.-.-00.-
3300 pF	5.0	11.0	13.0	10.0	500	R41.LF.1330.-.-00.-
4700 pF	5.0	11.0	13.0	10.0	500	R41.LF.1470.-.-00.-
6800 pF	6.0	12.0	13.0	10.0	500	R41.LF.1680.-.-00.-
0.010 μ F	5.0	11.0	18.0	15.0	500	R41.LI.2100.-.-00.-
0.015 μ F	6.0	12.0	18.0	15.0	500	R41.LI.2150.-.-00.-
0.022 μ F	7.5	13.5	18.0	15.0	500	R41.LI.2220.-.-00.-
0.033 μ F	8.5	14.5	18.0	15.0	500	R41.LI.2330.-.-00.-
0.047 μ F	6.0	15.0	26.5	22.5	500	R41.LN.2470.-.-00.-
0.068 μ F	7.0	16.0	26.5	22.5	500	R41.LN.2680.-.-00.-
0.10 μ F	10.0	18.5	26.5	22.5	500	R41.LN.3100.-.-00.-

Mechanical version and packaging (Table 1)

Tolerance: K ($\pm 10\%$); M ($\pm 20\%$)

All dimensions are in mm.

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		12.70	1	10.0/15.0	DQ
AMMO-PACK		19.05	2	22.5	DQ
REEL $\varnothing$ 355mm		12.70	1	10.0/15.0	CK
REEL $\varnothing$ 500mm		19.05	2	22.5/27.5	CK
Loose, short leads	4 ⁺²				00
Loose, long leads (p=10mm)	25 $\pm$ 1				JY
Loose, long leads (p $\geq$ 15mm)	30 ⁺⁵				50

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

Rated Cap.	300 Vac				Max dv/dt at 420Vdc (V/ μ s)	Part Number
	B	H	L	p		
1000 pF	4.0	9.0	13.0	10.0	800	R41.3F.1100.-.-00.-
1500 pF	4.0	9.0	13.0	10.0	800	R41.3F.1150.-.-00.-
2200 pF	4.0	9.0	13.0	10.0	800	R41.3F.1220.-.-00.-
3300 pF	5.0	11.0	13.0	10.0	800	R41.3F.1330.-.-00.-
4700 pF	5.0	11.0	13.0	10.0	800	R41.3F.1470.-.-M1.M
6800 pF	6.0	12.0	13.0	10.0	800	R41.3F.1470.-.-00.-
6800 pF	6.0	12.0	13.0	10.0	800	R41.3F.1680.-.-00.-
0.010 μ F	5.0	11.0	18.0	15.0	600	R41.3I.2100.-.-00.-
0.015 μ F	6.0	12.0	18.0	15.0	600	R41.3I.2150.-.-00.-
0.022 μ F	7.5	13.5	18.0	15.0	600	R41.3I.2220.-.-00.-
0.033 μ F	8.5	14.5	18.0	15.0	600	R41.3I.2330.-.-00.-
0.047 μ F	10.0	16.0	18.0	15.0	600	R41.3I.2470.-.-00.-
0.068 μ F	7.0	16.0	26.5	22.5	500	R41.3N.2680.-.-00.-
0.10 μ F	10.0	18.5	26.5	22.5	500	R41.3N.3100.-.-00.-
0.15 μ F	11.0	20.0	26.5	22.5	500	R41.3N.3150.-.-00.-
0.22 μ F	13.0	22.0	26.5	22.5	500	R41.3N.3220.-.-00.-
0.22 μ F	13.0	22.0	32.0	27.5	400	R41.3R.3220.-.-00.M
0.33 μ F	14.0	28.0	32.0	27.5	400	R41.3R.3330.-.-00.-
0.47 μ F	18.0	33.0	32.0	27.5	400	R41.3R.3470.-.-00.-
0.68 μ F	18.0	33.0	32.0	27.5	400	R41.3R.3680.-.-00.-
0.47 μ F	13.0	24.0	41.5	37.5	300	R41.3W3470.-.-00.-
0.68 μ F	16.0	28.5	41.5	37.5	300	R41.3W3680.-.-00.-
1.0 μ F	20.0	40.0	41.5	37.5	300	R41.3W4100.-.-00.-

Mechanical version and packaging (Table 1)

Tolerance: K ($\pm 10\%$); M ($\pm 20\%$)