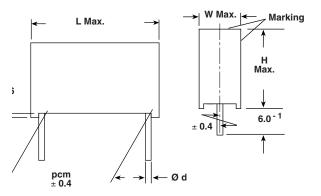


Not for new designs

Vishay Roederstein

Double Metallized Polypropylene Film Capacitor Radial AC and Pulse Capacitor

Dimensions in millimeters



W	Ød
< 16.0	0.8
≥ 16.0	1.0

MAIN APPLICATIONS

High voltage, high current and high pulse operations, deflection circuits in TV sets (S-correction and fly-back tuning). Protection circuits in SMPS's. Snubber and electronic ballast circuits. Input and output filtering in SPS designs, storage, timing and integrating circuits.

MARKING

Manufacturer's logo/type/C-value/rated voltage/tolerance/date of manufacture

DIELECTRIC

Polypropylene film

ELECTRODES

Vacuum deposited aluminum

COATING

Flame retardant plastic case (UL-class 94 V-0), blue, epoxy resin sealed

CONSTRUCTION

Extended double-sided metallized polyester film, internal series connection, single-sided metallized polypropylene film (refer to general information)

LEADS

Tinned wire

IEC TEST CLASSIFICATION

55/100/56, according to IEC 60068

FEATURES

Product is completely lead (Pb)-free Product is RoHS-compliant



OPERATING TEMPERATURE RANGE

- 55°C to + 100°C

(e3)

CAPACITANCE RANGE

1000pF to 0.68μF

ROHS

CAPACITANCE TOLERANCES

 $\pm 20\%$ (M), $\pm 10\%$ (K), $\pm 5\%$ (J)

RATED VOLTAGES (UR):

630 VDC, 1000 VDC, 1600 VDC, 2000 VDC

PERMISSIBLE AC VOLTAGES (RMS) UP TO 60Hz 400 VAC, 600 VAC, 650 VAC, 700 VAC

TEST VOLTAGE (ELECTRODE/ELECTRODE)

 $1.6 \times U_R$ for $2 \times U_R$

INSULATION RESISTANCE

Measured at 100 VDC after one minute For C \leq 0.33μF: 100,000 M Ω minimum value TIME CONSTANT Measured at 100 VDC after one minute For C > 0.33μF: 30,000 s minimum value

TEMPERATURE COEFFICIENT

- 250 x 10⁻⁶/°C (typical value)

CAPACITANCE DRIFT

Up to $+40^{\circ}$ C, $\pm 0.5\%$ for a period of two years

DERATING FOR DC AND AC.CATEGORY VOLTAGE UC

At + 85°C: $U_C = 1.0 U_R$ At + 100°C: $U_C = 0.7 UR$

SELF INDUCTANCE

~ 6 nH measured with 2mm long leads

PULL TEST ON LEADS

 \geq 30 N in direction of leads according to IEC 60068-2-21

RELIABILITY

Operational life > 300,000 h Failure rate < 5 FIT (40°C and 0.5 x U_B)

For further details, please refer to the general information available at www.vishav.com/doc?26033.

MAXIMUM PULSE RISE TIME

PCM		Maximum Pulse Rise Time d _ν /d _t [V/μs]								
(mm)	630 VDC	1000 VDC	1600 VDC	2000 VDC						
15	3430	6600	11100	_						
22.5	2120	2800	3800	6200						
27.5	1524	2000	2680	4200						
37.5	980	1280	1690	2600						

If the maximum pulse voltage is less than the rated voltage higher d_V/d_t values can be permitted.

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DISSIPATION FACTOR TAN δ

MEASURED AT	C ≤ 0.1µF	0.1μF < C ≤ 1.0μF				
1kHz	0.3 x 10 ⁻³	0.3 x 10 ⁻³				
10kHz	0.4 x 10 ⁻³	0.4 x 10 ⁻³				
100kHz	1.5 x 10 ⁻³	_				
	Maximum values					

CAPACI- TANCE	CAPACI- TANCE CODE	VOLTAGE CODE 63 630 VDC/400 VAC			VOLTAGE CODE 10 1000 VDC/600 VAC			VOLTAGE CODE 13 1600 VDC/650 VAC			VOLTAGE CODE 20 2000 VDC/700 VAC						
		W	Н	L	PCM	W	Н	L	PCM	W	Н	L	PCM	W	Н	L	PCM
1000pF	- 210	_	_	_	_	_	_	_	_	5.5	10.5	18.0	15	6.5	14.5	26.5	22.5
1500pF	- 215	_	_	_	_	_	_	_	_	5.5	10.5	18.0	15	6.5	14.5	26.5	22.5
2200pF	- 222	_	_	_	_	_	_	_	_	5.5	10.5	18.0	15	6.5	14.5	26.5	22.5
3300pF	- 233	_	_	_	_	5.5	10.5	18.0	15	6.5	12.5	18.0	15	6.5	14.5	26.5	22.5
4700pF	- 247	_	_	_	_	5.5	10.5	18.0	15	7.5	13.5	18.0	15	6.5	14.5	26.5	22.5
6800pF	- 268	5.5	10.5	18.0	15	6.5	12.5	18.0	15	8.5	14.5	18.0	15	7.5	15.5	26.5	22.5
0.01μF	- 310	5.5	10.5	18.0	15	6.5	14.5	26.5	22.5	6.5	14.5	26.5	22.5	8.5	16.5	26.5	22.5
0.015μF	- 315	6.5	12.5	18.0	15	6.5	14.5	26.5	22.5	7.5	15.5	26.5	22.5	10.5	18.5	26.5	22.5
0.022μF	- 322	7.5	13.5	18.0	15	6.5	14.5	26.5	22.5	8.5	16.5	26.5	22.5	11.5	20.5	31.5	27.5
0.033μF	- 333	8.5	14.5	18.0	15	7.5	15.5	26.5	22.5	10.5	18.5	26.5	22.5	13.5	23.5	31.5	27.5
0.047μF	- 347	7.5	15.5	26.5	22.5	10.5	18.5	26.5	22.5	11.5	20.5	31.5	27.5	15.0	24.5	31.5	27.5
0.068μF	- 368	8.5	16.5	26.5	22.5	11.0	21.0	26.5	22.5	11.5	20.5	31.5	27.5	16.5	29.5	31.5	27.5
0.1μF	- 410	10.5	18.5	26.5	22.5	11.5	20.5	31.5	27.5	15.0	24.5	31.5	27.5	16.0	28.5	41.5	37.5
0.15μF	- 415	11.5	20.5	31.5	27.5	13.5	23.5	31.5	27.5	14.5	24.5	41.5	37.5	_	_	_	_
0.22μF	- 422	13.5	23.5	31.5	27.5	16.5	29.5	31.5	27.5	16.0	28.5	41.5	37.5	_	_	_	_
0.33μF	- 433	15.0	24.5	31.5	27.5	_	_	_	_	_	_	_	_	_	_	_	_
0.47μF	- 447	14.5	24.5	41.5	37.5	_	_	_	_	_	_	_	_	_	_	_	_
0.68μF	- 468	18.0	32.5	41.5	37.5	_				_	_	_	_	_	_		_

Further C-values upon request.

RECOMMENDED PACKAGING

LETTER CODE	TYPE OF PACKAGING	HEIGHT (H) (mm)	REEL DIAMETER (mm)	ER ORDERING CODE PCM EXAMPLES 15		PCM 22.5 - 27.5	PCM 37.5
D	AMMO	16.5	S*	MKP 1846-310/635-D	Х	_	_
G	AMMO	18.5	S*	MKP 1846-310/635-G	Х	_	_
F	REEL	16.5	350	MKP 1846-310/635-F	Х	_	_
W	REEL	18.5	350	MKP 1846-310/635-W	Х	_	_
V	REEL	18.5	500	MKP 1846-410/105-V	Х	Х	_
G	AMMO	18.5	L*	MKP 1846-410/105-G	_	Х	_
_	BULK	_	_	MKP 1846-422-135	Х	Х	Χ

^{*}S = box size 55 x 210 x 340mm (W x H x L)

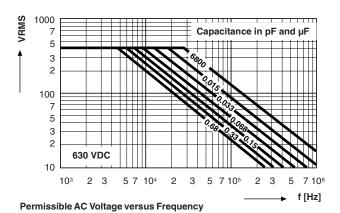
^{*}L = box size 60 x 360 x 510mm (W x H x L)

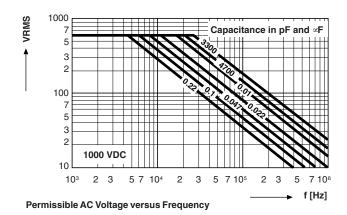


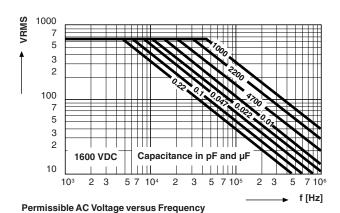


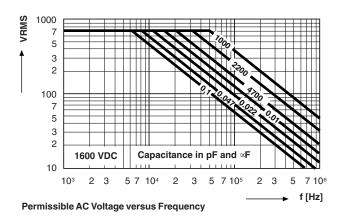
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