

Interference Suppression Film Capacitors MKP Radial Potted Type

APPLICATIONS

X1 class

REFERENCE STANDARDS

"IEC 60384-14 2nd edition and EN 132400"

"IEC 60065, pass. flamm. class B"

250 V: CSA-C22.2 No 1; UL1414

275 V: UL1283; ENEC

MARKING

C-value; tolerance; rated voltage; sub-class; manufacturer's type designation; code for dielectric material, only for pitch ≥ 15 mm; manufacturer location; year and week

DIELECTRIC

Polypropylene film

ELECTRODES

Metallized film

CONSTRUCTION

Mono construction

RATED VOLTAGE

AC 275 V; 50 to 60 Hz

PERMISSIBLE DC VOLTAGE

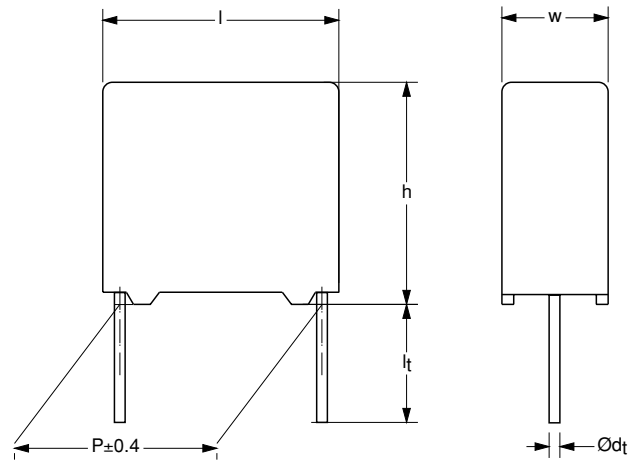
DC 630 V

ENCAPSULATION

Plastic case, epoxy resin sealed, flame retardant UL-class 94 V-0

CLIMATIC TESTING CLASS ACC. TO EN 60068-1

55/100/21/B



Dimensions in mm

CAPACITANCE RANGE (E12 SERIES)

E12 series 0.001 to 1 μ F
Preferred values acc. to E6

CAPACITANCE TOLERANCE

$\pm 20\%$; $\pm 10\%$; $\pm 5\%$

LEADS

Tinned wire

RATED TEMPERATURE

100 °C

MAXIMUM APPLICATION TEMPERATURE

100 °C

FEATURES

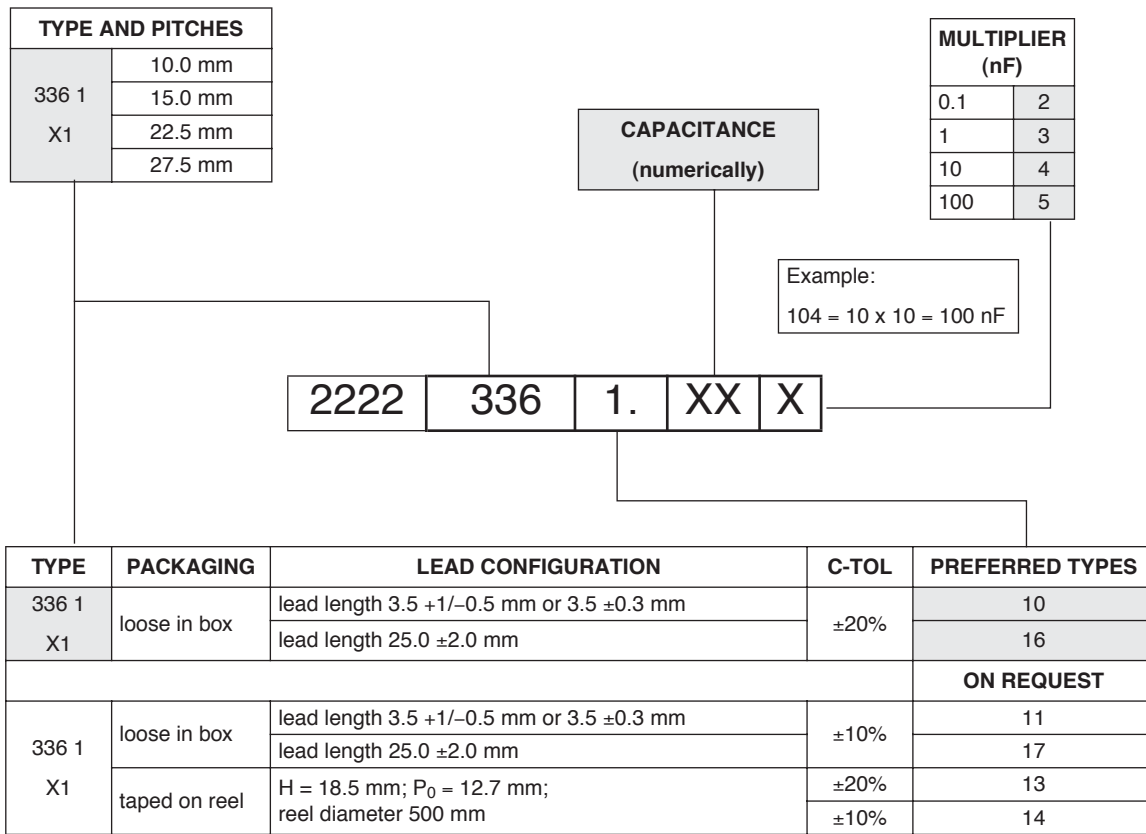
10 to 27.5 mm lead pitch. Supplied loose in box, taped on reel

DETAIL SPECIFICATION

For more detailed data and test requirements contact:
filmcaps.roeselare@vishay.com



COMPOSITION OF CATALOG NUMBER



SPECIFIC REFERENCE DATA MKP 336 1 275 VAC

DESCRIPTION	VALUE	
Tangent of loss angle: C ≤ 100 nF 100 nF < C ≤ 470 nF C > 470 nF	at 10 kHz	at 100 kHz
	≤10 × 10 ⁻⁴	≤50 × 10 ⁻⁴
	≤20 × 10 ⁻⁴	≤100 × 10 ⁻⁴
	≤70 × 10 ⁻⁴	-
Rated voltage pulse slope (dU/dt) _R at 385 V (DC): P = 10 mm P = 15 mm P = 22.5 mm P = 27.5 mm	200 V/μs 500 V/μs 300 V/μs 200 V/μs	
R between leads, for C ≤ 0.33 μF at 100 V; 1 minute	>15000 MΩ	
RC between leads, for C > 0.33 μF at 100 V; 1 minute	>5000 s	
R between leads and case; 100 V; 1 minute	>30000 MΩ	
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	3400 V; 1 minute	
Withstanding (AC) voltage between leads and case	2050 V; 1 minute	



$U_{Rac} = 275 V$; $C-tol = \pm 20\%$

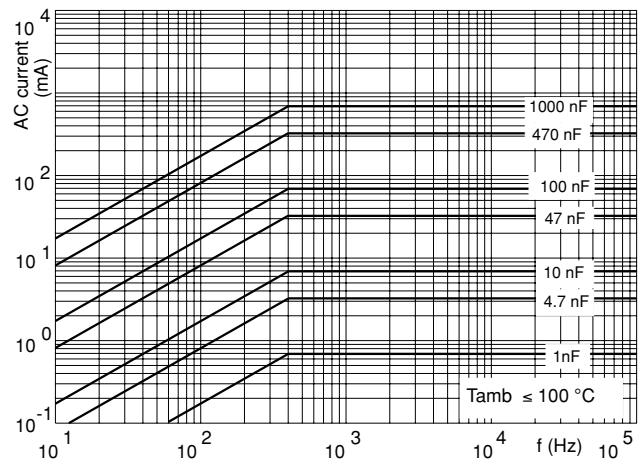
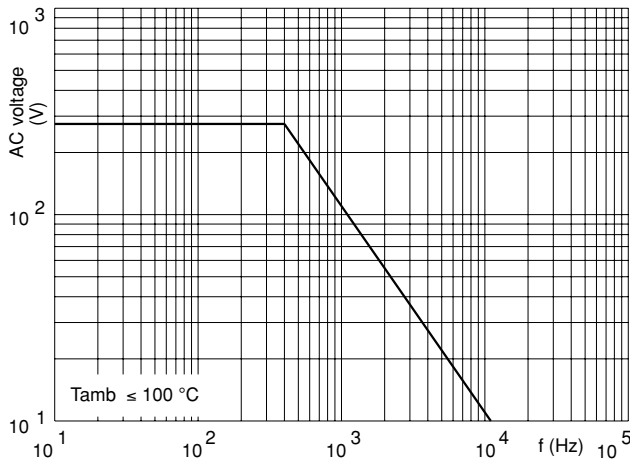
C (μF)	DIMENSIONS ⁽¹⁾ w × h × l (mm)	MASS (g)	CATALOG NUMBER 2222 336 AND PACKAGING					
			LOOSE IN BOX				REEL	
			$l_t = 3.5 \pm 1/-0.5mm^{(2)}$		$l_t = 25.0 \pm 2.0 mm$		H = 18.5 mm; P ₀ = 12.7 mm	
			last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ
Pitch = 10.0 ±0.4 mm; d_t = 0.60 ±0.06 mm								
0.001	4.0 × 10.0 × 12.5	0.6	10102	1000	16102	1250	13102	1400
0.0015			10152		16152		13152	
0.0022			10222		16222		13222	
0.0033	5.0 × 11.0 × 12.5	0.9	10332	1000	16332	1000	13332	1100
0.0047			10472		16472		13472	
0.0068			10682		16682		13682	
0.01	6.0 × 12.0 × 12.5	1.0	10103	750	16103	750	13103	900
Pitch = 15.0 ±0.4 mm; d_t = 0.80 ±0.08 mm								
0.01	5.0 × 11.0 × 17.5	1.2	19001	1000	19007	1000	19002	1100
0.015			10153		16153		13153	
0.022			10223		16223		13223	
0.033	6.0 × 12.0 × 17.5	1.4	10333	1000	16333	1000	13333	900
0.047	7.0 × 13.5 × 17.5	1.9	10473	1000	16473	500	13473	800
0.068	8.5 × 15.0 × 17.5	2.6	10683	1000	16683	500	13683	650
0.1	10.0 × 16.5 × 17.5	3.1	10104	500	16104	500	13104	600
Pitch = 22.5 ±0.4 mm; d_t = 0.80 ±0.08 mm								
0.1	7.0 × 16.5 × 26.0	3.2	19003	200	19008	500	19004	550
0.15	8.5 × 18.0 × 26.0	4.4	10154	200	16154	500	13154	450
0.22	10.0 × 19.5 × 26.0	5.5	10224	200	16224	500	13224	400
Pitch = 27.5 ±0.4 mm; d_t = 0.80 ±0.08 mm								
0.22	11.0 × 21.0 × 31.0	7.8	19005	100	19009	125		
0.33	13.0 × 23.0 × 31.0	10.4	10334	100	16334	125		
0.47	15.0 × 25.0 × 31.0	12.8	10474	100	16474	125		
0.68	18.0 × 28.0 × 31.0	17.2	10684	100	16684	125		
1	21.0 × 31.0 × 31.0	20.4	10105	50	16105	75		

Notes

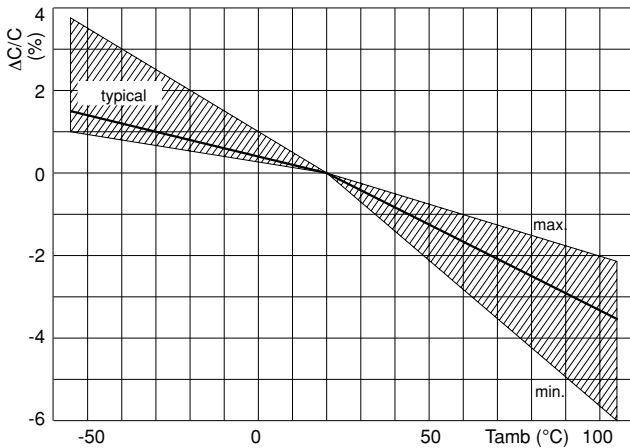
- Specified dimensions only valid for $\pm 20\%$ tolerance values.
- $l_t = 3.5 \pm 0.3 mm$ for pitch = 15 mm; 22.5 mm and 27.5 mm.



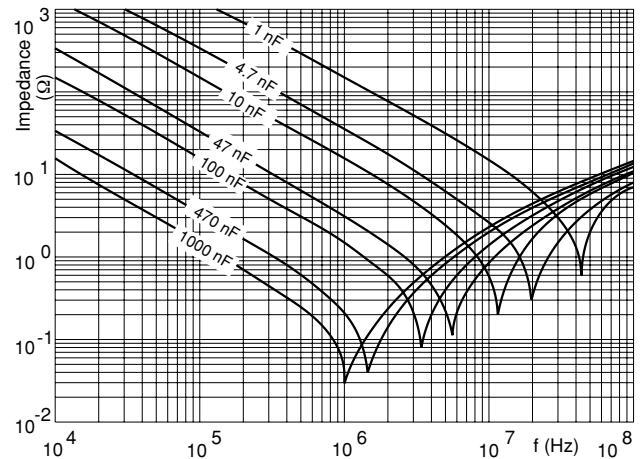
MAXIMUM RMS VOLTAGE AND AC CURRENT (SINEWAVE) AS A FUNCTION OF FREQUENCY



CAPACITANCE



IMPEDANCE



APPROVALS

COUNTRY	SPECIFICATION	ELECTRICAL VALUES	FILE NUMBERS	APPROVAL MARK
U.S.A. (for AC 250 V) (for AC 275 V)	UL1414 UL1283	1 nF to 1 μF 1 nF to 1 μF	E112471 E109565	
Canada (for AC 250 V)	CSA-C22.2 No.1	1 nF to 1 μF	1104860 (LR 94054-6)	
CB TEST CERTIFICATE (for AC 275 V)		1 nF to 1 μF: 55/100/21/B	DE-1-7482	
Europe (for AC 275 V)	EN132400 IEC 60384-14 2 nd edition	1 nF to 1 μF	ENEC/B01/2001	