

# Metallized Polyester Film Capacitors

## MKT Radial Epoxy Lacquered Type

**APPLICATIONS**

Blocking and coupling. Bypass and energy reservoir

**MARKING**

C-value; tolerance; rated voltage

**DIELECTRIC**

Polyester film

**ELECTRODES**

Vacuum deposited aluminium

**COATING**

Flame retardant epoxy material (UL-class 94 V-0)

**CONSTRUCTION**

Wound mono construction

**LEADS**

Tinned wire

**CAPACITANCE RANGE (E12 SERIES)**

 0.01 to 1.0  $\mu\text{F}$ 
**CAPACITANCE TOLERANCE**
 $\pm 10\%$ ;  $\pm 5\%$ 
**RATED (DC) VOLTAGE**

63 V; 100 V; 250 V; 400 V

**RATED (AC) VOLTAGE**

40 V; 63 V; 160 V; 220 V

**CLIMATIC CATEGORY**

55/105/56

**RATED TEMPERATURE**

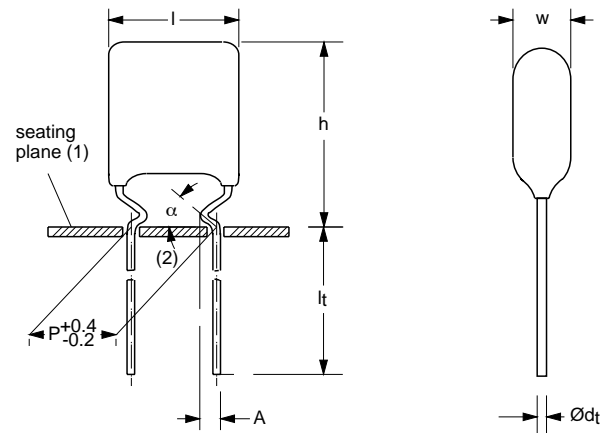
85 °C

**MAXIMUM APPLICATION TEMPERATURE**

105 °C

**REFERENCE SPECIFICATIONS**

IEC 60384-2

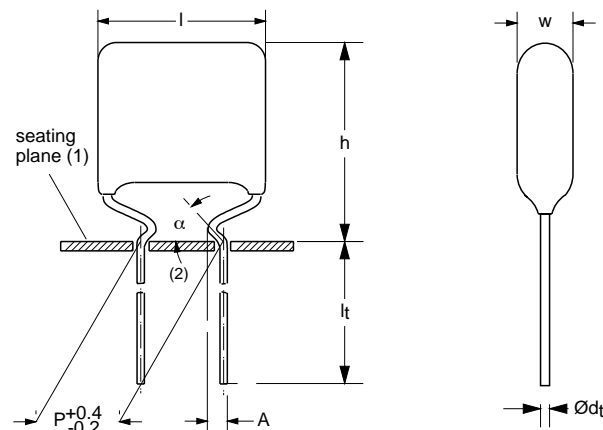
**KINKED LEADS**


Dimensions in mm.

 (1) Hole  $\varnothing 1.0$  for  $d_t = 0.5$  mm.

 (2)  $0 \leq \alpha < 50^\circ$ .

 (3)  $A = 1.7 \pm 0.3$  mm.

**BENT BACK LEADS**


Dimensions in mm.

 (1) Hole  $\varnothing 1.0$  for  $d_t = 0.5$  mm.

 (2)  $0 \leq \alpha < 50^\circ$ .

 (3)  $A = 1.7 \pm 0.3$  mm.

**PERFORMANCE GRADE**

Grade 1 (long life)

**FEATURES**

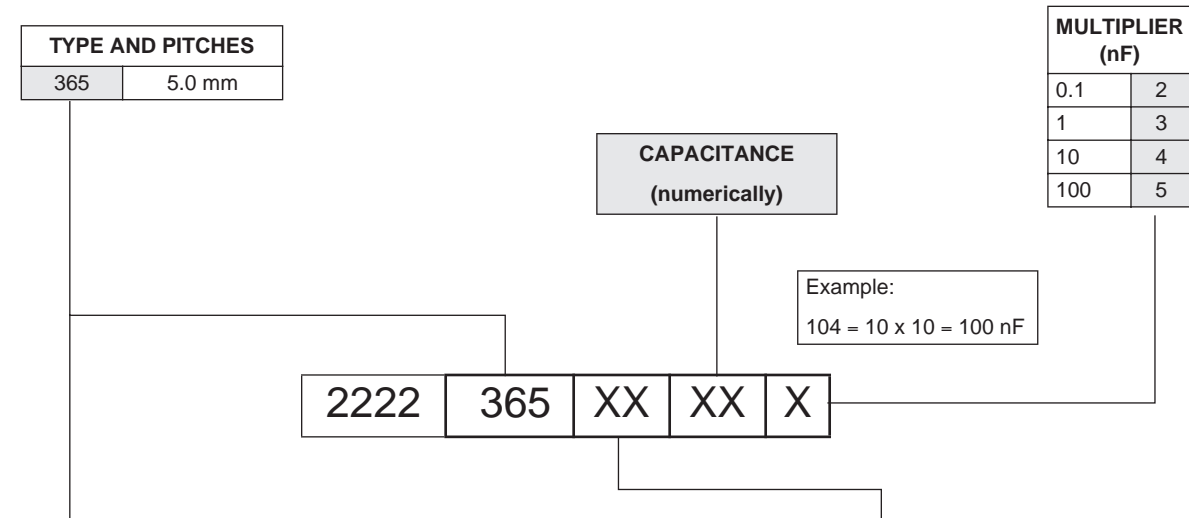
Available taped and loose in box

**DETAIL SPECIFICATION**

For more detailed data and test requirements see "Type detail specification HQN-384-02/105"



## COMPOSITION OF CATALOG NUMBER



TYPE	PACKAGING	LEAD CONFIGURATION	PREFERRED TYPES				
			C-TOL	63 V	100 V	250 V	400 V
365	ammopack: kinked	H = 16.0 mm; P <sub>0</sub> = 12.7 mm	±10%	75	85	-	-
			±5%	76	86	-	-
	ammopack: bent back	H = 16.0 mm; P <sub>0</sub> = 12.7 mm	±10%	15	25	45	55
			±5%	16	26	46	56
dimensions of this code numbers stays between brackets							
ON REQUEST							
365	taped on reel; kinked	H = 16.0 mm; P <sub>0</sub> = 12.7 mm; reel diameter = 360 mm	±10%	71	81	-	-
			±5%	72	82	-	-
	taped on reel; bent back	H = 16.0 mm; P <sub>0</sub> = 12.7 mm; reel diameter = 360 mm	±10%	11	21	41	51
			±5%	12	22	42	52
dimensions of this code numbers stays between brackets							

## SPECIFIC REFERENCE DATA

DESCRIPTION	VALUE			
	at 1 kHz	at 10 kHz	at 100 kHz	
Tangent of loss angle: C ≤ 0.47 μF	≤75 × 10 <sup>-4</sup>	≤130 × 10 <sup>-4</sup>	≤225 × 10 <sup>-4</sup>	
0.47 μF < C ≤ 1.0 μF	≤75 × 10 <sup>-4</sup>	≤130 × 10 <sup>-4</sup>	-	
Rated voltage pulse slope (dU/dt) <sub>R</sub>	at 63 V (DC)	at 100 V (DC)	at 250 V (DC)	at 400 V (DC)
	110 V/μs	110 V/μs	130 V/μs	170 V/μs
R between leads, for C ≤ 0.33 μF: at 10 V; 1 minute at 100 V; 1 minute	>15000 MΩ	>15000 MΩ	>30000 MΩ	>30000 MΩ
RC between leads, for C > 0.33 μF at 10 V; 1 minute	>5000 s	>5000 s		
R between interconnecting leads and casing; 100 V; 1 minute	>30000 MΩ	>30000 MΩ	>30000 MΩ	>30000 MΩ
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	100 V; 1 minute	160 V; 1 minute	400 V; 1 minute	640 V; 1 minute



$U_{Rdc} = 63\text{ V}$ ;  $U_{Rac} = 40\text{ V}$  (kinked leads)

C ( $\mu\text{F}$ )	DIMENSIONS $w_{max} \times h_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 365 ..... AND PACKAGING			
			AMMOPACK; H = 16.0 mm			REEL
			C-tol = $\pm 10\%$	C-tol = $\pm 5\%$	SPQ	SPQ
			last 5 digits of catalog number	last 5 digits of catalog number		
<b>Pitch = 5.0 +0.4/-0.2 mm; <math>d_t = 0.50 \pm 0.05\text{ mm}</math></b>						
0.047	4.0 × 12.5 × 7.3	0.3	75473	76473	1500	1500
0.056			75563	76563		
0.068			75683	76683		
0.082			75823	76823		
0.1			75104	76104		
0.12			75124	76124		
0.15	4.0 × 13.0 × 7.3	0.3	75154	76154	1500	1500
0.18	4.0 × 13.5 × 7.3	0.4	75184	76184	1000	1000
0.22	4.2 × 13.5 × 7.3	0.4	75224	76224	1000	1000
0.27	4.5 × 14.0 × 7.3	0.4	75274	76274	1000	1000
0.33	4.5 × 14.5 × 7.3	0.4	75334	76334	1000	1000
0.39			75394	76394		
0.47	4.5 × 15.5 × 7.3	0.4	75474	76474	1000	1000
0.56	5.0 × 14.0 × 7.3	0.4	75564	76564	1000	1000
0.68	5.5 × 14.5 × 7.3	0.4	75684	76684	1000	1000
0.82	5.5 × 15.0 × 7.3	0.5	75824	76824	1000	1000
1.0	5.5 × 15.5 × 7.3	0.5	75105	76105	1000	1000

$U_{Rdc} = 63\text{ V}$ ;  $U_{Rac} = 40\text{ V}$  (bent back leads)

C ( $\mu\text{F}$ )	DIMENSIONS $w_{max} \times h_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 365 ..... AND PACKAGING			
			AMMOPACK; H = 16.0 mm			REEL
			C-tol = $\pm 10\%$	C-tol = $\pm 5\%$	SPQ	SPQ
			last 5 digits of catalog number	last 5 digits of catalog number		
<b>Pitch = 5.0 +0.4/-0.2 mm; <math>d_t = 0.60 \pm 0.06\text{ mm}</math></b>						
0.12	4.0 × 13.5 × 10.0	0.4	15124	16124	1500	1500
0.15			15154	16154		
0.18			15184	16184		
0.22			15224	16224		
0.27	4.5 × 14.0 × 10.0	0.5	15274	16274	1000	1000
0.33	5.0 × 14.5 × 10.0	0.6	15334	16334	1000	1000
0.39			15394	16394		
0.47	5.5 × 15.0 × 10.0	0.7	15474	16474	1000	1000
0.56			15564	16564		
0.68			15684	16684		
0.82			15824	16824		
1.0			15105	16105		



$U_{Rdc} = 100\text{ V}$ ;  $U_{Rac} = 63\text{ V}$  (kinked leads)

C ( $\mu\text{F}$ )	DIMENSIONS $w_{max} \times h_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 365 ..... AND PACKAGING			
			AMMOPACK; H = 16.0 mm			REEL
			C-tol = $\pm 10\%$	C-tol = $\pm 5\%$	SPQ	SPQ
			last 5 digits of catalog number	last 5 digits of catalog number		
<b>Pitch = 5.0 +0.4/-0.2 mm; <math>d_t = 0.50 \pm 0.05\text{ mm}</math></b>						
0.01	3.7 × 12.5 × 7.3	0.3	85103	86103	1500	1500
0.012			85123	86123		
0.015			85153	86153		
0.018			85183	86183		
0.022			85223	86223		
0.027			85273	86273		
0.033			85333	86333		
0.039			85393	86393		
0.047	4.0 × 12.5 × 7.3	0.3	85473	86473	1500	1500
0.056			85563	86563		
0.068			85683	86683		
0.082	4.0 × 13.0 × 7.3	0.3	85823	86823	1500	1500
0.1	4.0 × 13.5 × 7.3	0.4	85104	86104	1000	1000
0.12			85124	86124		
0.15			85154	86154		
0.18			85184	86184		
0.22	4.2 × 13.5 × 7.3	0.4	85224	86224	1000	1000
0.27	4.5 × 14.0 × 7.3	0.4	85274	86274	1000	1000

$U_{Rdc} = 100\text{ V}$ ;  $U_{Rac} = 63\text{ V}$  (bent back leads)

C ( $\mu\text{F}$ )	DIMENSIONS $w_{max} \times h_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 365 ..... AND PACKAGING			
			AMMOPACK; H = 16.0 mm			REEL
			C-tol = $\pm 10\%$	C-tol = $\pm 5\%$	SPQ	SPQ
			last 5 digits of catalog number	last 5 digits of catalog number		
<b>Pitch = 5.0 +0.4/-0.2 mm; <math>d_t = 0.60 \pm 0.06\text{ mm}</math></b>						
0.039	4.0 × 13.5 × 10.0	0.4	25393	26393	1500	1500
0.047			25473	26473		
0.056			25563	26563		
0.068			25683	26683		
0.082			25823	26823		
0.1			25104	26104		
0.12	4.5 × 14.0 × 10.5	0.5	25124	26124	1000	1000
0.15	5.0 × 14.5 × 10.5	0.6	25154	26154	1000	1000
0.18			25184	26184		
0.22			25224	26224		
0.27	6.0 × 15.5 × 10.5	0.7	25274	26274	1000	1000
0.33			25334	26334		
0.39			25394	26394		
0.47			25474	26474		



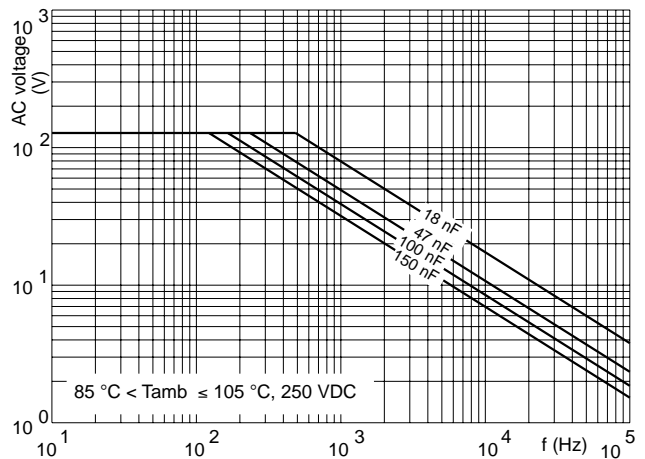
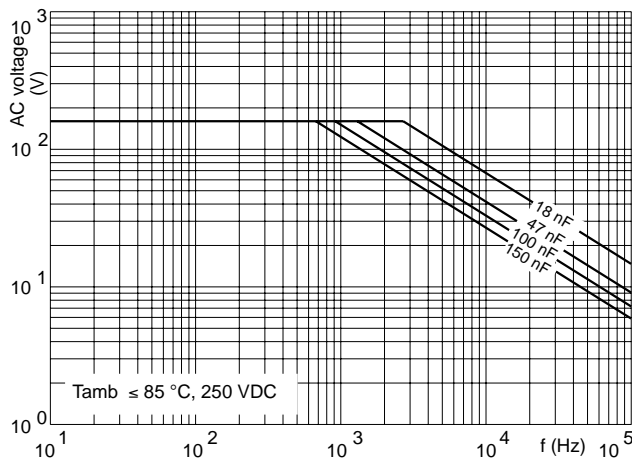
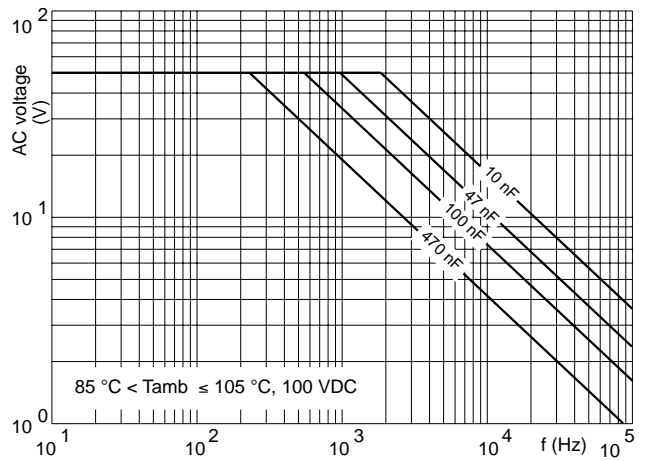
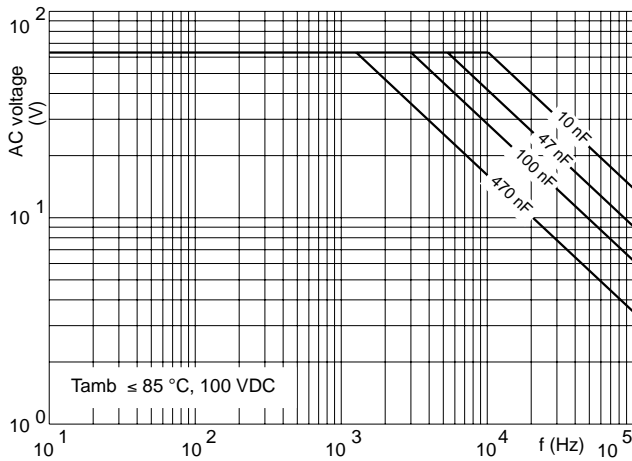
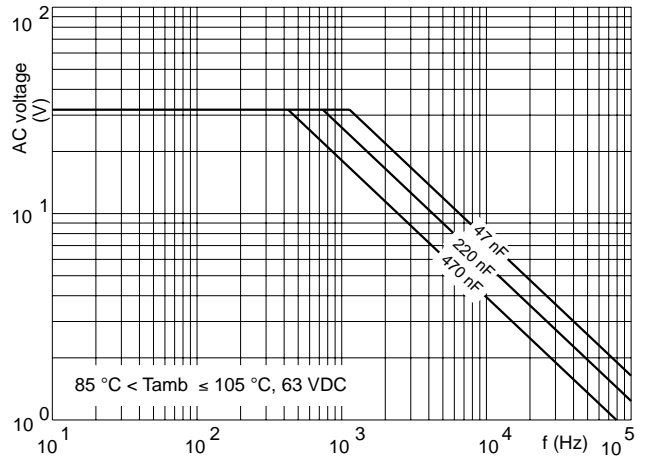
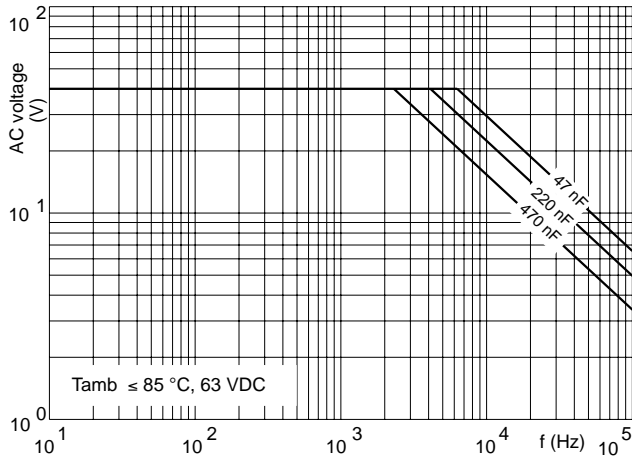
**U<sub>Rdc</sub> = 250 V; U<sub>Rac</sub> = 160 V (bent back leads)**

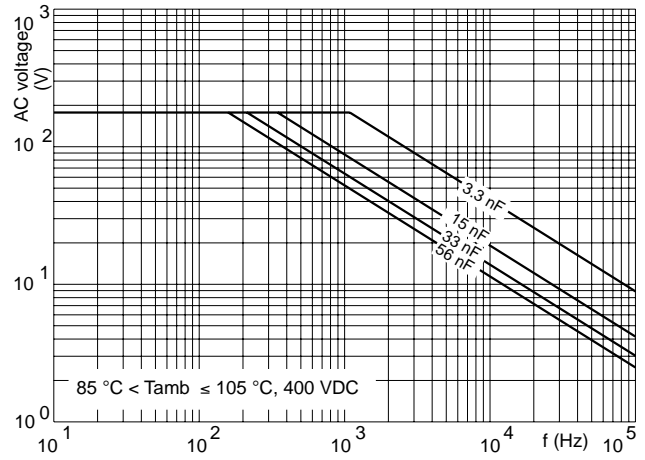
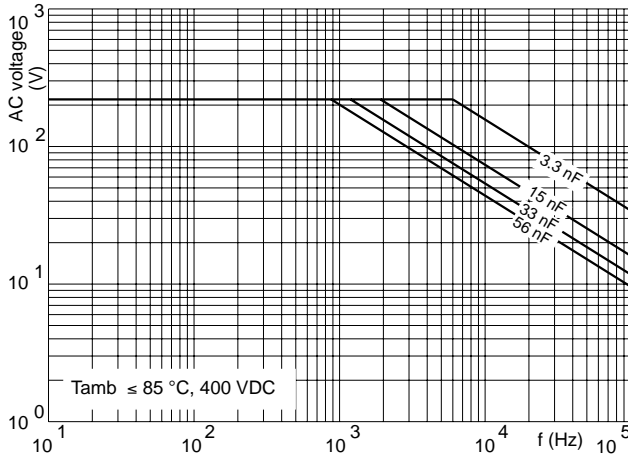
C ( $\mu$ F)	DIMENSIONS $w_{max} \times h_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 365 ..... AND PACKAGING			
			AMMOPACK; H = 16.0 mm			REEL
			C-tol = $\pm 10\%$	C-tol = $\pm 5\%$	SPQ	SPQ
			last 5 digits of catalog number	last 5 digits of catalog number		
<b>Pitch = 5.0 +0.4/-0.2 mm; d<sub>t</sub> = 0.60 <math>\pm</math>0.06 mm</b>						
0.018	4.0 x 13.5 x 10.0	0.4	45183	46183	1500	1500
0.022			45223	46223		
0.027			45273	46273		
0.033			45333	46333		
0.039			45393	46393		
0.047			45473	46473		
0.056			45563	46563		
0.068			4.5 x 14.0 x 10.0	0.5		
0.082	4.5 x 13.0 x 10.0	0.5	45823	46823	1250	1250
0.1	5.0 x 13.5 x 10.0	0.6	45104	46104	1000	1250
0.12	5.5 x 14.0 x 10.0	0.6	45124	46124	1000	1000
0.15	5.5 x 15.5 x 10.0	0.7	45154	46154	1000	1000

**U<sub>Rdc</sub> = 400 V; U<sub>Rac</sub> = 220 V (bent back leads)**

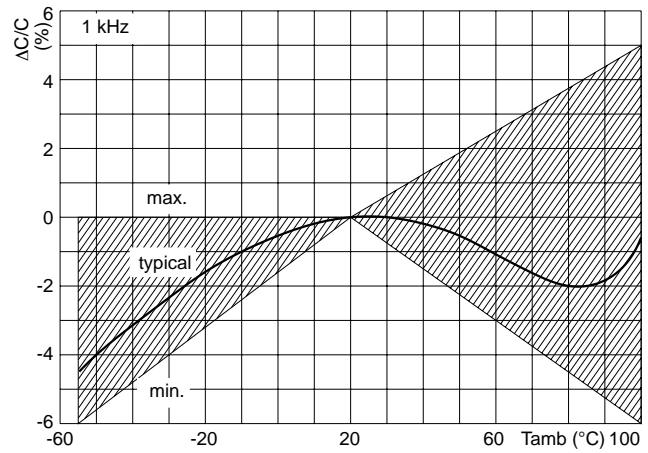
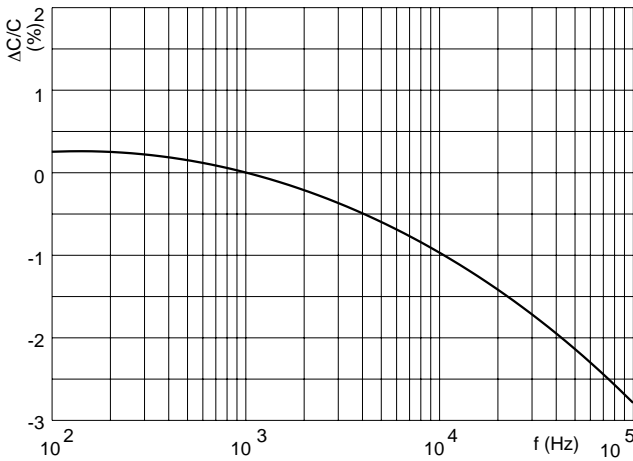
C ( $\mu$ F)	DIMENSIONS $w_{max} \times h_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 365 ..... AND PACKAGING			
			AMMOPACK; H = 16.0 mm			REEL
			C-tol = $\pm 10\%$	C-tol = $\pm 5\%$	SPQ	SPQ
			last 5 digits of catalog number	last 5 digits of catalog number		
<b>Pitch = 5.0 +0.4/-0.2 mm; d<sub>t</sub> = 0.60 <math>\pm</math>0.06 mm</b>						
0.0033	4.0 x 13.5 x 10.0	0.4	55332	56332	1500	1500
0.0039			55392	56392		
0.0047			55472	56472		
0.0056			55562	56562		
0.0068			55682	56682		
0.0082			55822	56822		
0.01			55103	56103		
0.012			55123	56123		
0.015			55153	56153		
0.018			4.5 x 13.0 x 10.0	0.6		
0.022	5.0 x 13.5 x 10.0	0.7	55223	56223	1000	1250
0.027	4.0 x 12.5 x 10.0	0.4	55273	56273	1500	1500
0.033	4.5 x 13.0 x 10.0	0.5	55333	56333	1250	1250
0.039	5.0 x 13.5 x 10.0	0.5	55393	56393	1000	1250
0.047	5.0 x 13.5 x 10.0	0.6	55473	56473	1000	1250
0.056	5.5 x 14.0 x 10.0	0.7	55563	56563	1000	1000

## MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY





**CAPACITANCE**



**IMPEDANCE**

