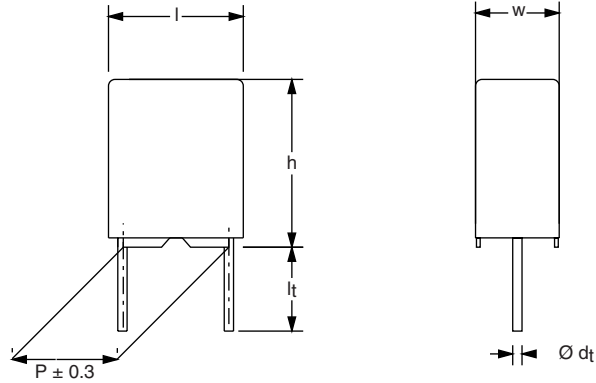


# Metallized Polyester Film Capacitors

## MKT Radial Potted Type



Dimensions in mm

### APPLICATIONS

Blocking and coupling. Bypass and energy reservoir

### MARKING

C-value; tolerance; rated voltage; manufacturer's emblem; year and week of manufacturer; manufacturer's type designation

### DIELECTRIC

Polyester film

### ELECTRODES

Vacuum deposited aluminum

### ENCAPSULATION

Flame retardant plastic case and epoxy resin (UL-class 94 V-0)

### CONSTRUCTION

Wound mono construction

### LEADS

Tinned wire

### FEATURES

Available taped and loose in box  
Lead (Pb)-free product  
RoHS-compliant product



**RoHS**  
COMPLIANT

### CAPACITANCE RANGE (E12 SERIES)

0.001 to 1.5  $\mu$ 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

55/100/56

### RATED TEMPERATURE

85 °C

### MAXIMUM APPLICATION TEMPERATURE

100 °C

### REFERENCE SPECIFICATIONS

IEC 60384-2

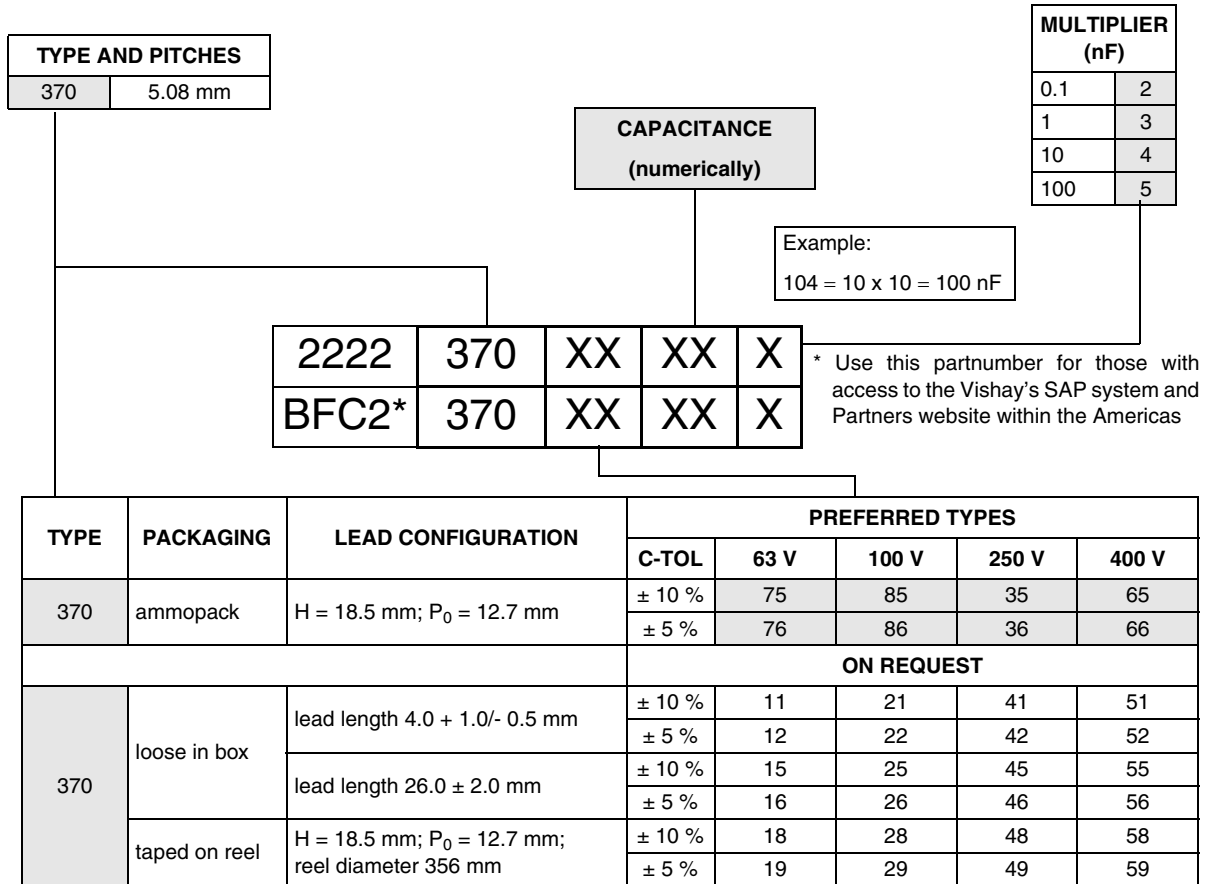
### PERFORMANCE GRADE

Grade 1 (long life)

### DETAIL SPECIFICATION

For more detailed data and test requirements contact:  
[filmcaps.roeselare@vishay.com](mailto:filmcaps.roeselare@vishay.com)

## COMPOSITION OF CATALOG NUMBER



## SPECIFIC REFERENCE DATA

DESCRIPTION	VALUE			
	at 1 kHz	at 10 kHz	at 100 kHz	
Tangent of loss angle:				
C ≤ 0.1 μF	≤ 75 × 10 <sup>-4</sup>	≤ 130 × 10 <sup>-4</sup>	≤ 250 × 10 <sup>-4</sup>	
0.1 μF < C ≤ 0.47 μF	≤ 75 × 10 <sup>-4</sup>	≤ 130 × 10 <sup>-4</sup>	≤ 300 × 10 <sup>-4</sup>	
0.47 μF < C ≤ 1.5 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)
	60 V/μs	110 V/μs	330 V/μs	630 V/μs
R between leads, for C ≤ 0.33 μF:				
at 10 V; 1 minute	> 15 000 MΩ			
at 100 V; 1 minute		> 15 000 MΩ	> 30 000 MΩ	> 30 000 MΩ
RC between leads, for:				
0.33 μF < C ≤ 1.0 μF at 10 V; 1 minute	> 5000 s			
C > 1.0 μF at 10 V; 1 minute	> 1000 s			
C > 0.33 μF at 100 V; 1 minute		> 5000 s		
R between interconnected leads and case (foil method)	> 30 000 MΩ	> 30 000 MΩ	> 30 000 MΩ	> 30 000 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
Withstanding (DC) voltage between leads and case	200 V; 1 minute	200 V; 1 minute	500 V; 1 minute	800 V; 1 minute



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MKT Radial Potted Type

$U_{Rdc} = 63\text{ V}$ ;  $U_{Rac} = 40\text{ V}$

C ( $\mu\text{F}$ )	DIMENSIONS W × H × L (mm)	MASS (g)	CATALOG NUMBER 2222 370 ..... AND PACKAGING					
			AMMOPACK			LOOSE IN BOX		REEL
			H = 18.5 mm; P <sub>0</sub> = 12.7 mm			short leads	long leads	SPQ
			C-tol = ± 10 %	C-tol = ± 5 %	SPQ	SPQ	SPQ	
last 5 digits of catalog number		SPQ	SPQ	SPQ				
Pitch = 5.08 ± 0.30 mm; d <sub>t</sub> = 0.50 ± 0.05 mm								
0.056	2.5 × 6.5 × 7.2	0.18	75563	76563	2000	2000	1000	2000
0.068			75683	76683				
0.082			75823	76823				
0.1			75104	76104				
0.12			75124	76124				
0.15			75154	76154				
0.18			75184	76184				
0.22	3.5 × 8.0 × 7.2	0.30	75224	76224	1500	2000	1000	1500
0.27			75274	76274				
0.33			75334	76334				
0.39			75394	76394				
0.47	75474	76474						
0.56	4.5 × 9.0 × 7.2	0.42	75564	76564	1000	2000	1000	1000
0.68			75684	76684				
0.82	6.0 × 11.0 × 7.2	0.64	75824	76824	750	2000	1000	1000
1			75105	76105				
1.2 <sup>1)</sup>			75125	76125				
1.5 <sup>1)</sup>			75155	76155				

**Note**

1. For C = 1.2  $\mu\text{F}$  and C = 1.5  $\mu\text{F}$ :  $U_{Rdc} = 50\text{ V}$  and  $U_{Rac} = 32\text{ V}$ .

$U_{Rdc} = 100\text{ V}$ ,  $U_{Rac} = 63\text{ V}$

C ( $\mu\text{F}$ )	DIMENSIONS W × H × L (mm)	MASS (g)	CATALOG NUMBER 2222 370 ..... AND PACKAGING					
			AMMOPACK			LOOSE IN BOX		REEL
			H = 18.5 mm; P <sub>0</sub> = 12.7 mm			short leads	long leads	SPQ
			C-tol = ± 10 %	C-tol = ± 5 %	SPQ	SPQ	SPQ	
last 5 digits of catalog number		SPQ	SPQ	SPQ				
Pitch = 5.08 ± 0.30 mm; d <sub>t</sub> = 0.50 ± 0.05 mm								
0.001	2.5 × 6.5 × 7.2	0.18	85102	86102	2000	2000	1000	2000
0.0012			85122	86122				
0.0015			85152	86152				
0.0018			85182	86182				
0.0022			85222	86222				
0.0027			85272	86272				
0.0033			85332	86332				
0.0039			85392	86392				
0.0047			85472	86472				
0.0056			85562	86562				
0.0068			85682	86682				
0.0082			85822	86822				
0.010			85103	86103				
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	85473	86473						
0.056	85563	86563						
0.068	85683	86683						
0.082	85823	86823						
0.1	85104	86104						
0.12	3.5 × 8.0 × 7.2	0.30	85124	86124	1500	2000	1000	1500
0.15			85154	86154				
0.18			85184	86184				
0.22	4.5 × 9.0 × 7.2	0.42	85224	86224	1000	2000	1000	1000
0.27			85274	86274				
0.33	6.0 × 11.0 × 7.2	0.64	85334	86334	750	2000	1000	1000
0.39			85394	86394				
0.47			85474	86474				

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$U_{Rdc} = 250\text{ V}$ ;  $U_{Rac} = 160\text{ V}$

C ( $\mu\text{F}$ )	DIMENSIONS W × H × L (mm)	MASS (g)	CATALOG NUMBER 2222 370 ..... AND PACKAGING					
			AMMOPACK		LOOSE IN BOX		REEL	
			H = 18.5 mm; P <sub>0</sub> = 12.7 mm		short leads	long leads	SPQ	
			C-tol = ± 10 %	C-tol = ± 5 %	SPQ	SPQ		
Pitch = 5.08 ± 0.30 mm; d <sub>t</sub> = 0.50 ± 0.05 mm			last 5 digits of catalog number		SPQ	SPQ	SPQ	SPQ
0.001	2.5 × 6.5 × 7.2	0.18	35102	36102	2000	2000	1000	2000
0.0012			35122	36122				
0.0015			35152	36152				
0.0018			35182	36182				
0.0022			35222	36222				
0.0027			35272	36272				
0.0033			35332	36332				
0.0039			35392	36392				
0.0047			35472	36472				
0.0056			35562	36562				
0.0068			35682	36682				
0.0082			35822	36822				
0.01			35103	36103				
0.012			35123	36123				
0.015			35153	36153				
0.018	35183	36183						
0.022	3.5 × 8.0 × 7.2	0.30	35223	36223	1500	2000	1000	1500
0.027			35273	36273				
0.033			35333	36333				
0.039	4.5 × 9.0 × 7.2	0.42	35393	36393	1000	2000	1000	1000
0.047			35473	36473				
0.056			35563	36563				
0.068	6.0 × 11.0 × 7.2	0.64	35683	36683	750	2000	1000	1000
0.082			35823	36823				
0.1			35104	36104				

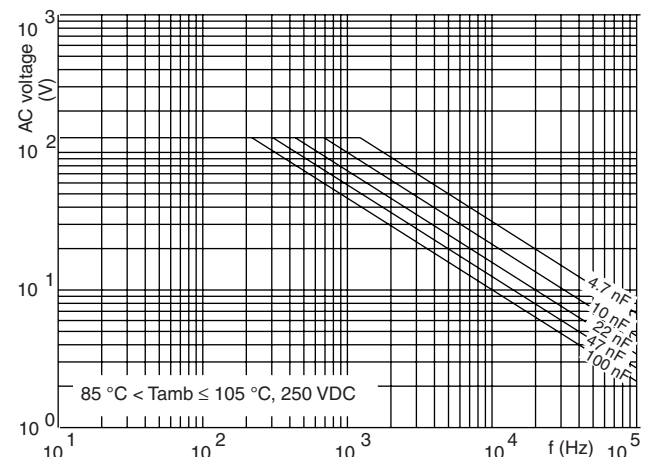
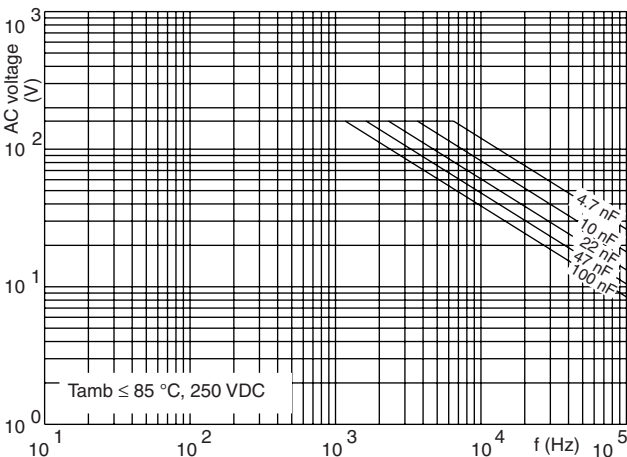
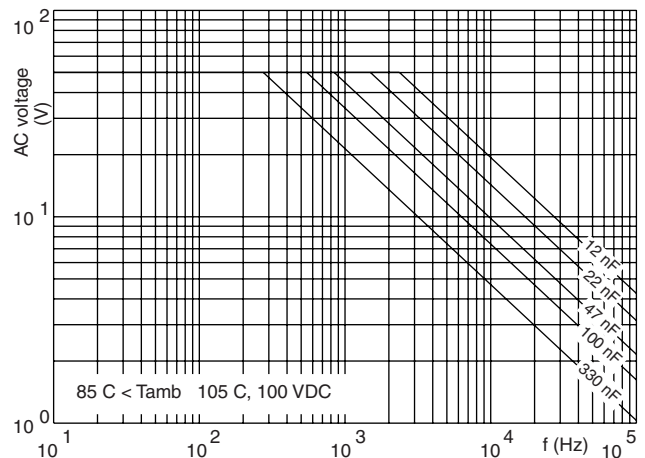
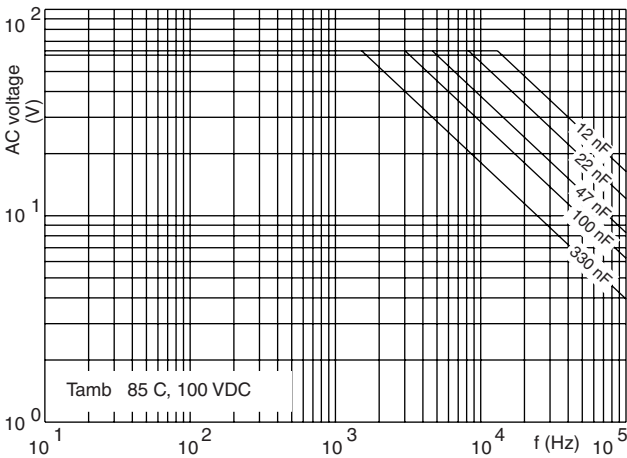
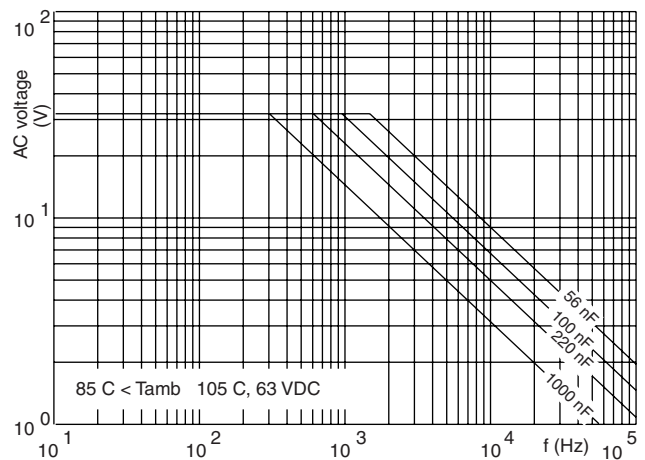
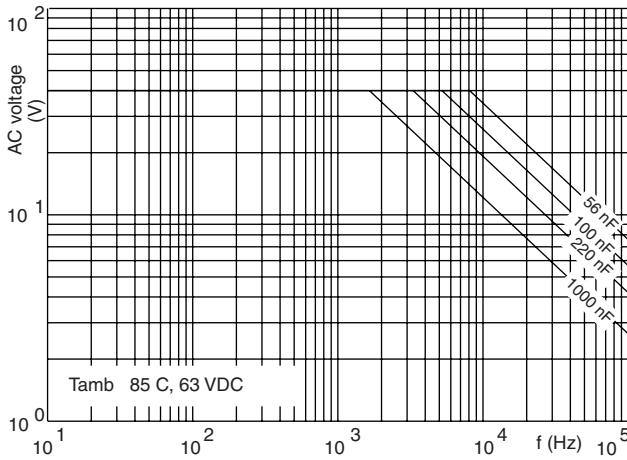
$U_{Rdc} = 400\text{ V}$ ;  $U_{Rac} = 220\text{ V}$

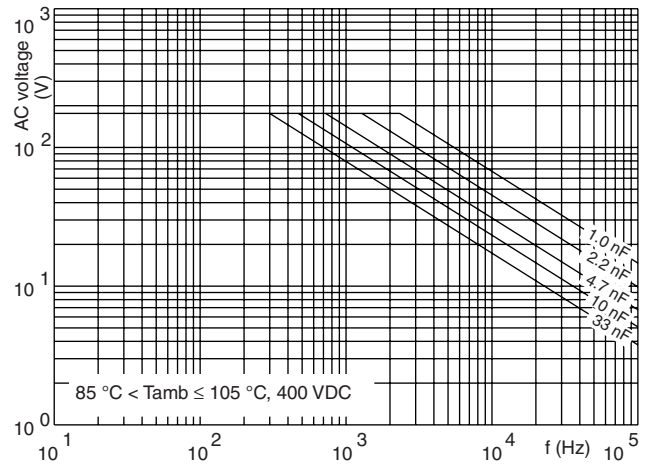
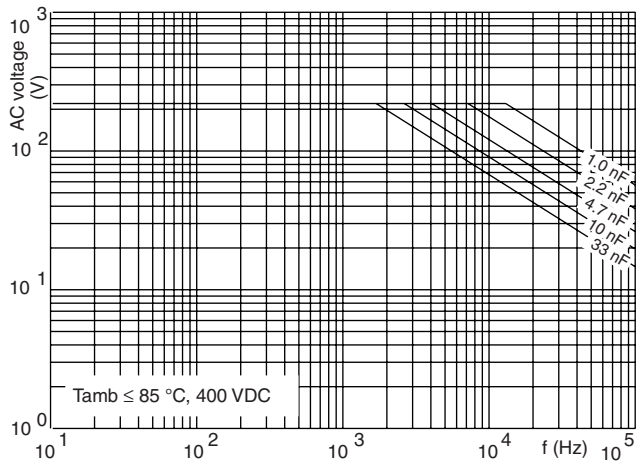
C ( $\mu\text{F}$ )	DIMENSIONS W × H × L (mm)	MASS (g)	CATALOG NUMBER 2222 370 ..... AND PACKAGING					
			AMMOPACK		LOOSE IN BOX		REEL	
			H = 18.5 mm; P <sub>0</sub> = 12.7 mm		short leads	long leads	SPQ	
			C-tol = ± 10 %	C-tol = ± 5 %	SPQ	SPQ		
Pitch = 5.08 ± 0.30 mm; d <sub>t</sub> = 0.50 ± 0.05 mm			last 5 digits of catalog number		SPQ	SPQ	SPQ	SPQ
0.001	2.5 × 6.5 × 7.2	0.18	65102	66102	2000	2000	1000	2000
0.0012			65122	66122				
0.0015			65152	66152				
0.0018			65182	66182				
0.0022			65222	66222				
0.0027			65272	66272				
0.0033			65332	66332				
0.0039			65392	66392				
0.0047			65472	66472				
0.0056			65562	66562				
0.0068			65682	66682				
0.0082			65822	66822				
0.01			65103	66103				
0.012			65123	66123				
0.015			65153	66153				
0.018	3.5 × 8.0 × 7.2	0.30	65183	66183	1500	2000	1000	1500
0.022			65223	66223				
0.027			65273	66273				
0.033	4.5 × 9.0 × 7.2	0.42	65333	66333	1000	2000	1000	1000
0.039			65393	66393				
0.047			65473	66473				
0.068	6.0 × 11.0 × 7.2	0.64	65683	66683	750	2000	1000	1000
0.082			65823	66823				
0.1			65104	66104				



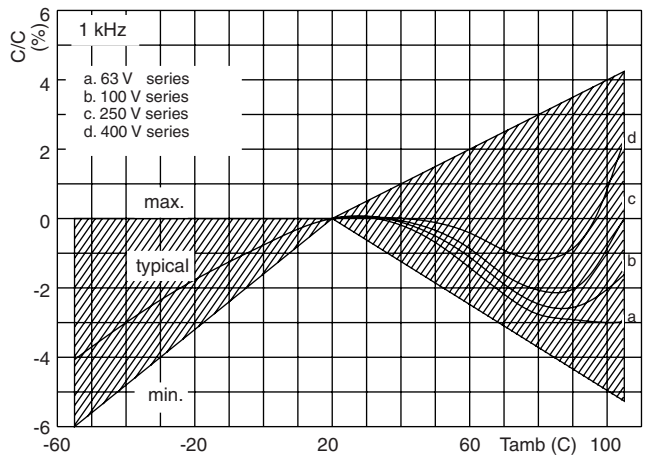
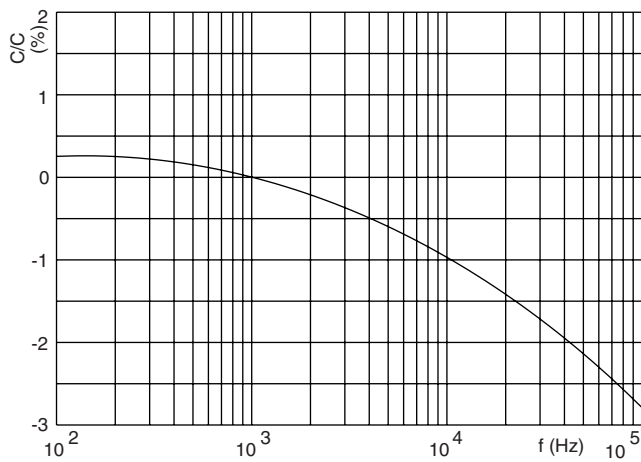
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MKT Radial Potted Type

MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY

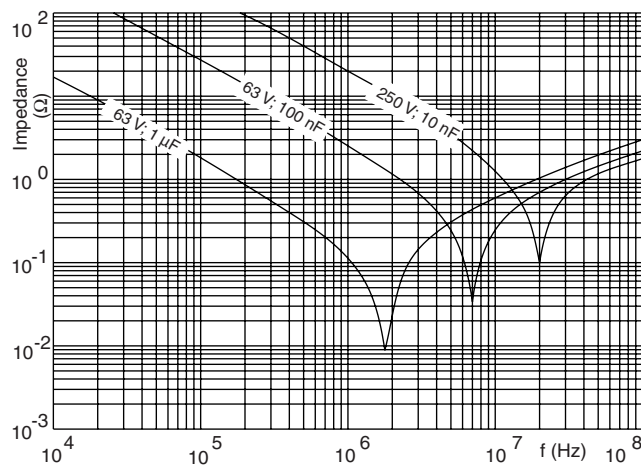




**CAPACITANCE**



**IMPEDANCE**





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