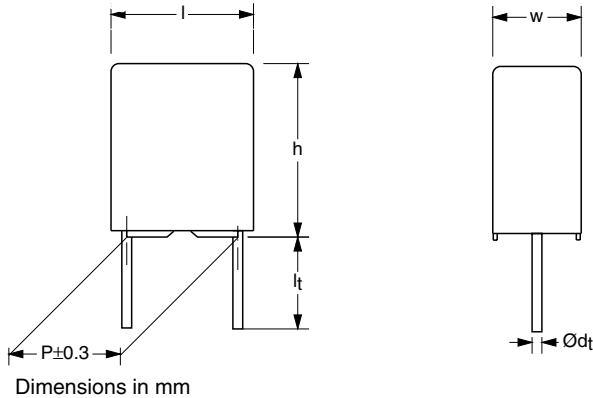


## Metallized Polyester Film Capacitors MKT Radial Potted Type



### APPLICATIONS

Blocking, coupling and decoupling. Bypass and energy reservoir

### MARKING

C-value; tolerance; rated voltage; 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

### CAPACITANCE TOLERANCE

± 10 %; ± 5 %

### FEATURES

Pitch 5 mm available loose in box, ammpack and taped on reel.

Lead (Pb)-free product

RoHS-compliant product



RoHS  
COMPLIANT

### CAPACITANCE RANGE (E12 SERIES)

0.001 to 1.2  $\mu$ F

### RATED (DC) VOLTAGE

63 V; 100 V; 250 V; 400 V

### RATED (AC) VOLTAGE

40 V; 63 V; 160 V; 200 V

### CLIMATIC CATEGORY

55/125/56

### RATED TEMPERATURE

85 °C

### MAXIMUM APPLICATION TEMPERATURE

125 °C

### REFERENCE SPECIFICATIONS

IEC 60384-2

### PERFORMANCE GRADE

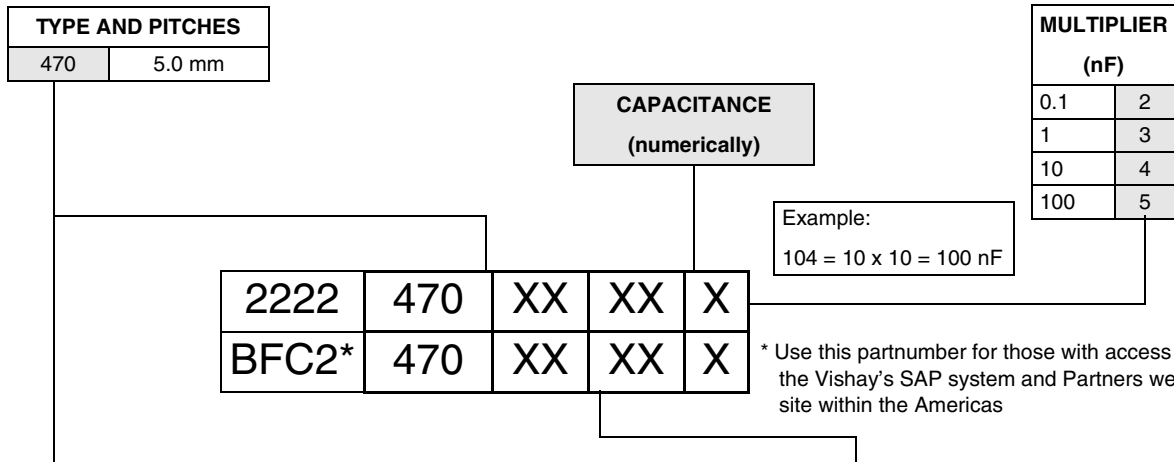
Grade 1 (long life)

### DETAIL SPECIFICATION

For more detailed data and test requirements see "Type detail specification HQN-384-02/104"



**COMPOSITION OF CATALOG NUMBER**



TYPE	PACKAGING	LEAD CONFIGURATION	PREFERRED TYPES				
			C-TOL	63 V	100 V	250 V	400 V
470	ammopack	H = 18.5 mm; P <sub>0</sub> = 12.7 mm	± 10 %	75	85	35	65
			± 5 %	76	86	36	66
			ON REQUEST				
470	loose in box	lead length 4.0 + 1.0/- 0.5 mm	± 10 %	11	21	41	51
			± 5 %	12	22	42	52
		lead length 26.0 ± 2.0 mm	± 10 %	15	25	45	55
			± 5 %	16	26	46	56
	taped on reel	H = 18.5 mm; P <sub>0</sub> = 12.7 mm; reel diameter 356 mm	± 10 %	18	28	48	58
			± 5 %	19	29	49	59

**SPECIFIC REFERENCE DATA**

DESCRIPTION	VALUE			
	at 1 kHz	at 10 kHz	at 100 kHz	
Tangent of loss angle:				
C ≤ 0.1 μF	≤ 60 × 10 <sup>-4</sup>	≤ 120 × 10 <sup>-4</sup>	≤ 200 × 10 <sup>-4</sup>	
0.1 μF < C ≤ 0.47 μF	≤ 60 × 10 <sup>-4</sup>	≤ 120 × 10 <sup>-4</sup>	≤ 225 × 10 <sup>-4</sup>	
0.47 μF < C ≤ 1.2 μF	≤ 60 × 10 <sup>-4</sup>	≤ 120 × 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)
	100 V/μs	160 V/μs	400 V/μs	800 V/μs
R between leads, for C ≤ 0.33 μF:				
at 10 V; 1 minute	> 15000 MΩ			
at 100 V; 1 minute		> 15000 MΩ	> 15000 MΩ	> 15000 MΩ
RC between leads, for:				
C > 0.33 μF at 10 V; 1 minute	> 5000 s			
C > 0.33 μF at 100 V; 1 minute		> 5000 s		
R between interconnected leads and case (foil method)	> 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
Withstanding (DC) voltage between leads and case	200 V; 1 minute	200 V; 1 minute	500 V; 1 minute	800 V; 1 minute



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

C ( $\mu\text{F}$ )	DIMENSIONS W × H × L (mm)	MASS (g)	CATALOG NUMBER 2222 470 ... AND PACKAGING						
			AMMOPACK			REEL	LOOSE IN BOX		
			H = 18.5 mm			SPQ	SPQ	short leads	long leads
			C-tol = $\pm 10\%$	C-tol = $\pm 5\%$	SPQ			SPQ	SPQ
last 5 digits of catalog number			last 5 digits of catalog number			SPQ	SPQ		
<b>Pitch = <math>5.0 \pm 0.3\text{ mm}</math>; <math>d_t = 0.50 \pm 0.05\text{ mm}</math></b>									
0.068	2.5 × 6.5 × 7.2	0.25	75683	76683	2000	2000	2000	1000	
0.082			75823	76823					
0.1			75104	76104					
0.12	3.5 × 8.0 × 7.2	0.35	75124	76124	1500	1500	2000	1000	
0.15			75154	76154					
0.18			75184	76184					
0.22			75224	76224					
0.27			75274	76274					
0.33			75334	76334					
0.39	75394	76394							
0.47	4.5 × 9.0 × 7.2	0.45	75474	76474	1000	1000	2000	1000	
0.56			75564	76564					
0.68			75684	76684					
0.82	6.0 × 11.0 × 7.2	0.60	75824	76824	750	1000	2000	1000	
1			75105	76105					
1.2			75125	76125					

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

C ( $\mu\text{F}$ )	DIMENSIONS W × H × L (mm)	MASS (g)	CATALOG NUMBER 2222 470 ... AND PACKAGING						
			AMMOPACK			REEL	LOOSE IN BOX		
			H = 18.5 mm			SPQ	SPQ	short leads	long leads
			C-tol = $\pm 10\%$	C-tol = $\pm 5\%$	SPQ			SPQ	SPQ
last 5 digits of catalog number			last 5 digits of catalog number			SPQ	SPQ		
<b>Pitch = <math>5.0 \pm 0.3\text{ mm}</math>; <math>d_t = 0.50 \pm 0.05\text{ mm}</math></b>									
0.022	2.5 × 6.5 × 7.2	0.25	85223	86223	2000	2000	2000	1000	
0.027			85273	86273					
0.033			85333	86333					
0.039			85393	86393					
0.047			85473	86473					
0.056			85563	86563					
0.068	3.5 × 8.0 × 7.2	0.35	85683	86683	1500	1500	2000	1000	
0.082			85823	86823					
0.1			85104	86104					
0.12			85124	86124					
0.15	4.5 × 9.0 × 7.2	0.45	85154	86154	1000	1000	2000	1000	
0.18			85184	86184					
0.22			85224	86224					
0.27	6.0 × 11.0 × 7.2	0.65	85274	86274	750	1000	2000	1000	
0.33			85334	86334					
0.39			85394	86394					
			85474	86474					
0.47									



Metallized Polyester Film Capacitors Vishay BCcomponents  
MKT Radial Potted Type

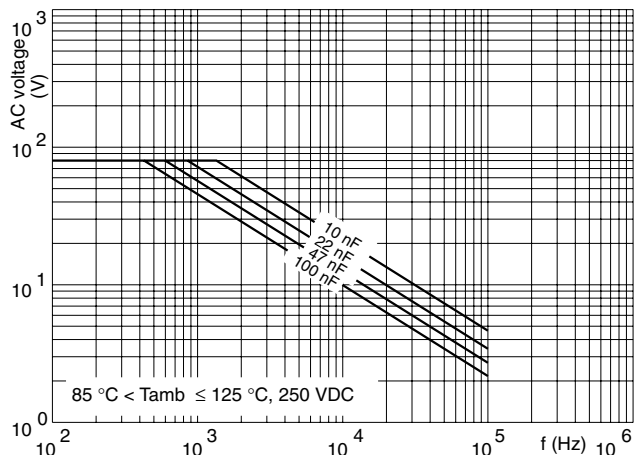
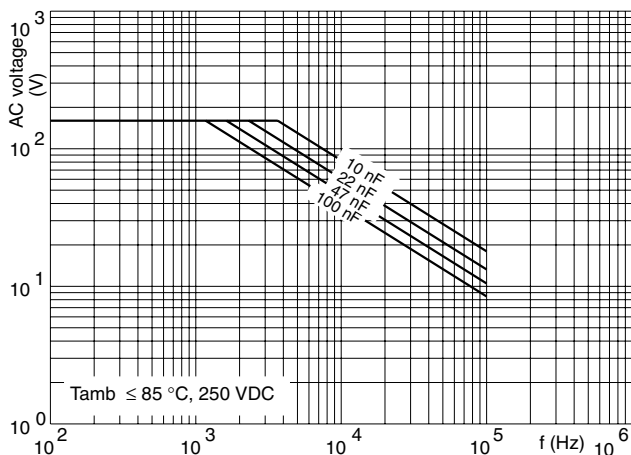
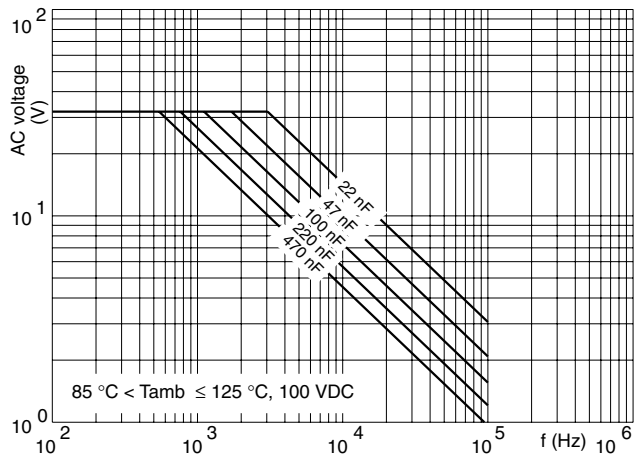
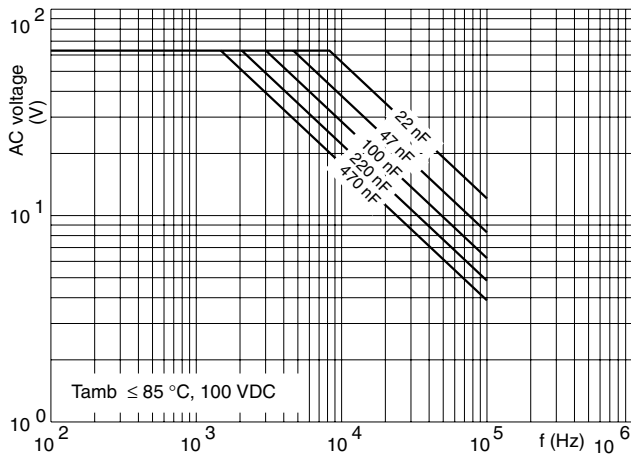
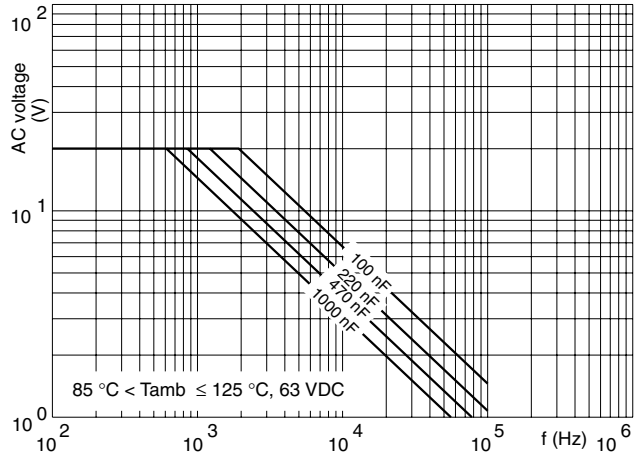
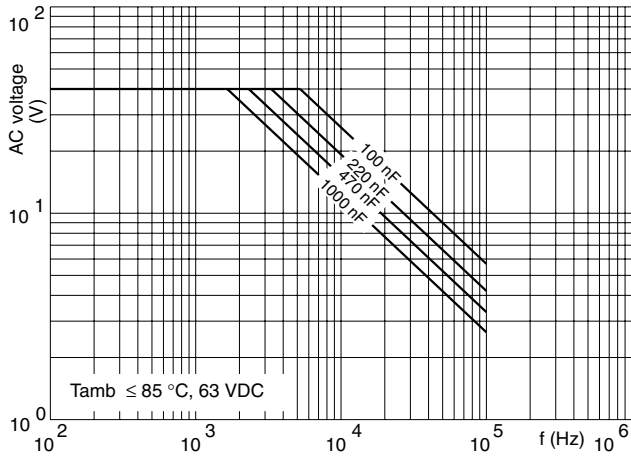
$U_{Rdc} = 250\text{ V}$ ;  $U_{Rac} = 160\text{ V}$

C ( $\mu\text{F}$ )	DIMENSIONS W × H × L (mm)	MASS (g)	CATALOG NUMBER 2222 470 ... AND PACKAGING						
			AMMOPACK			REEL	LOOSE IN BOX		
			H = 18.5 mm			SPQ	SPQ	short leads	long leads
			C-tol = $\pm 10\%$	C-tol = $\pm 5\%$	SPQ			SPQ	SPQ
last 5 digits of catalog number	last 5 digits of catalog number	SPQ	SPQ	SPQ	SPQ				
<b>Pitch = <math>5.0 \pm 0.3\text{ mm}</math>; <math>d_t = 0.50 \pm 0.05\text{ mm}</math></b>									
0.01 0.012 0.015 0.018	2.5 × 6.5 × 7.2	0.25	35103 35123 35153 35183	36103 36123 36153 36183	2000	2000	2000	1000	
0.022 0.027 0.033 0.039	3.5 × 8.0 × 7.2	0.35	35223 35273 35333 35393	36223 36273 36333 36393	1500	1500	2000	1000	
0.047 0.056 0.068	4.5 × 9.0 × 7.2	0.45	35473 35563 35683	36473 36563 36683	1000	1000	2000	1000	
0.082 0.1 0.12	6.0 × 11.0 × 7.2	0.60	35823 35104 35124	36823 36104 36124	750	1000	2000	1000	

$U_{Rdc} = 400\text{ V}$ ;  $U_{Rac} = 200\text{ V}$

C ( $\mu\text{F}$ )	DIMENSIONS W × H × L (mm)	MASS (g)	CATALOG NUMBER 2222 470 ... AND PACKAGING						
			AMMOPACK			REEL	LOOSE IN BOX		
			H = 18.5 mm			SPQ	SPQ	short leads	long leads
			C-tol = $\pm 10\%$	C-tol = $\pm 5\%$	SPQ			SPQ	SPQ
last 5 digits of catalog number	last 5 digits of catalog number	SPQ	SPQ	SPQ	SPQ				
<b>Pitch = <math>5.0 \pm 0.3\text{ mm}</math>; <math>d_t = 0.50 \pm 0.05\text{ mm}</math></b>									
0.001 0.0012 0.0015 0.0018 0.0022 0.0027 0.0033 0.0039 0.0047 0.0056 0.0068 0.0082	2.5 × 6.5 × 7.2	0.25	65102 65122 65152 65182 65222 65272 65332 65392 65472 65562 65682 65822	66102 66122 66152 66182 66222 66272 66332 66392 66472 66562 66682 66822	2000	2000	2000	1000	
0.01 0.012 0.015	3.5 × 8.0 × 7.2	0.35	65103 65123 65153	66103 66123 66153	1500	1500	2000	1000	
0.018 0.022 0.027	4.5 × 9.0 × 7.2	0.45	65183 65223 65273	66183 66223 66273	1000	1000	2000	1000	
0.033 0.039 0.047	6.0 × 11.0 × 7.2	0.60	65333 65393 65473	66333 66393 66473	750	1000	2000	1000	

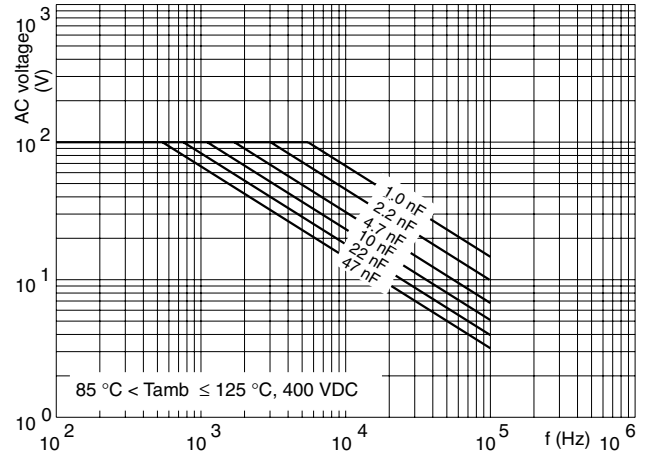
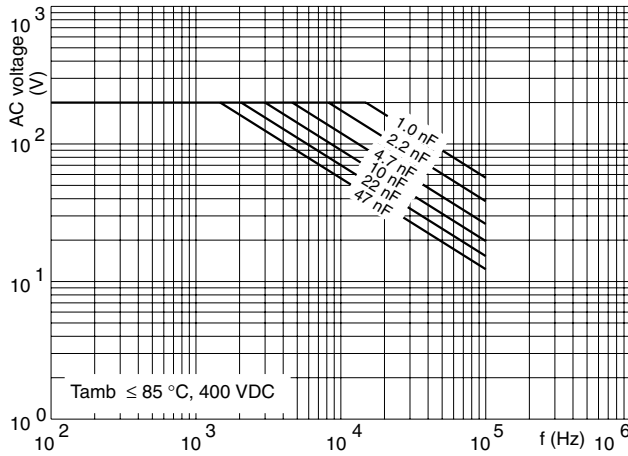
## MAXIMUM RMS VOLTAGE (SENEAWE) AS A FUNCTION OF FREQUENCY



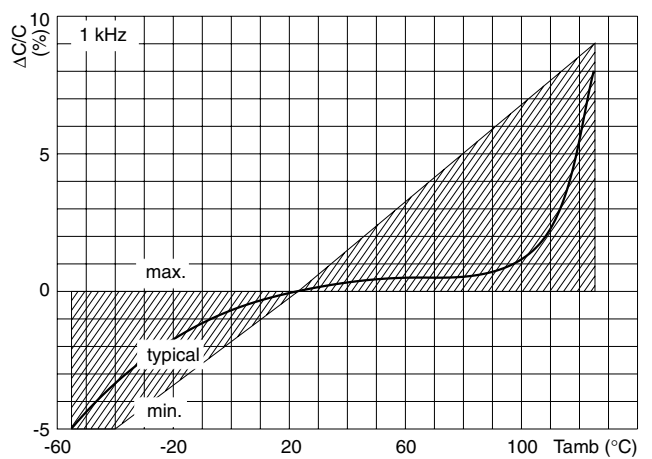
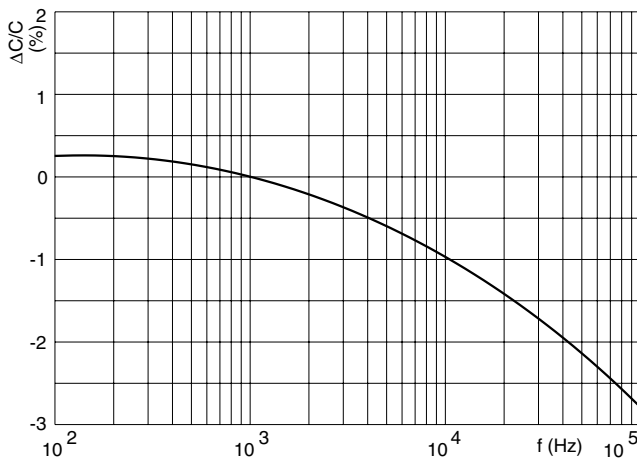


Metallized Polyester Film Capacitors  
MKT Radial Potted Type

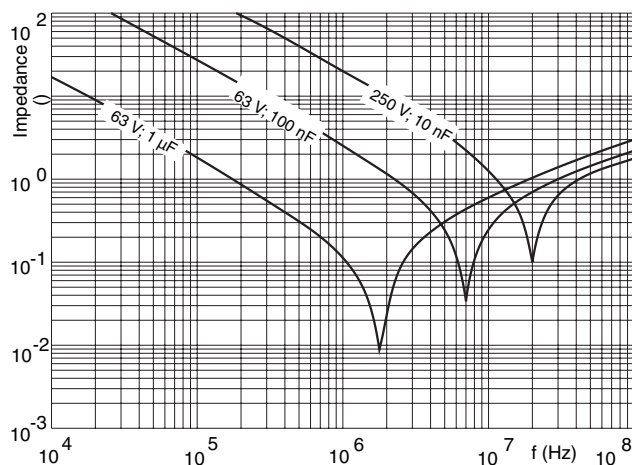
Vishay BCcomponents



CAPACITANCE



IMPEDANCE





## Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.