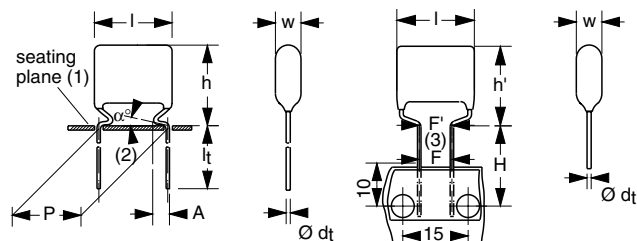


**KP/MKP 375**

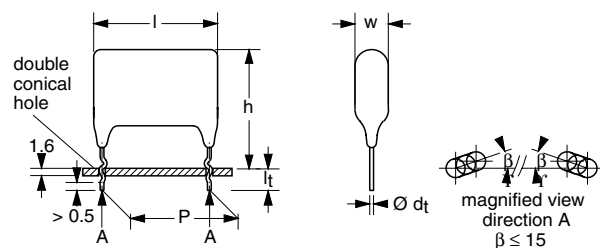
Vishay BCcomponents

## AC and Pulse Polypropylene Film Capacitors KP/MKP Radial Epoxy Lacquered Type



Dimensions in mm

- (1) Hole  $\varnothing 1.3$  for  $d_t = 0.8$  mm
- (2)  $0 \leq \alpha < 50^\circ$
- (3)  $|F - F'| < 0.3$  mm  
 $F = 7.5 + 0.6/-0.1$  mm
- (4)  $A = 2.5 + 1.5/-0.5$  mm



Dimensions in mm

**APPLICATIONS**

Where high currents and steep pulses occur. For deflection circuits in television receivers and monitor sets.

**MARKING**

C-value; tolerance; rated voltage; manufacturer's type designation; code for dielectric material; code for monitor type; manufacturer's emblem

**DIELECTRIC**

Polypropylene film

**ELECTRODES**

Metallized film and aluminum foil

**COATING**

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

**CONSTRUCTION**

Internal serial construction

**FEATURES**

10 to 27.5 mm pitch. Supplied loose (including lock lead versions) and taped. Bent back version for automatic insertion available.



**RoHS**  
COMPLIANT

**LEADS**

Tinned wire

**CAPACITANCE RANGE (E24 SERIES)**

0.1 to 270 nF

**CAPACITANCE TOLERANCE**

$\pm 5\%$ ;  $\pm 3.5\%$

**RATED (DC) VOLTAGE**

630 V; 1000 V; 1600 V; 2000 V; 2500 V

**RATED (AC) VOLTAGE**

300 V; 400 V; 500 V; 600 V; 600 V

**RATED PEAK-TO-PEAK VOLTAGE**

850 V; 1100 V; 1400 V; 1700 V; 1700 V

**CLIMATIC CATEGORY**

55/105/56

**RATED TEMPERATURE**

85 °C

**MAXIMUM APPLICATION TEMPERATURE**

105 °C

**REFERENCE SPECIFICATIONS**

IEC 60384-17

**PERFORMANCE GRADE**

for  $C > 5.6$  nF: grade 1 (long life)

for  $C \leq 5.6$  nF: grade 2

**STABILITY GRADE**

Grade 2

**DETAIL SPECIFICATION**

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



AC and Pulse Polypropylene  
Film Capacitors KP/MKP  
Radial Epoxy Lacquered Type

COMPOSITION OF CATALOG NUMBER

TYPE AND PITCHES	
375	10.0/7.5 mm
	15.0/7.5 mm
	10.0 mm
	15.0 mm
	22.5 mm
	27.5 mm

**CAPACITANCE**  
(numerically; but not for lock lead)

MULTIPLIER (nF)	
0.01	1
0.1	2
1	3
10	4

2222	375	XX	XX	X
BFC2*	375	XX	XX	X

Example:  
104 = 10 x 10 = 100 nF

\* Use this partnumber for those with access to the Vishay's SAP system and Partners website within the Americas

TYPE	PACKAGING	LEAD CONFIGURATION	PREFERRED TYPES							
			C-TOL	630 V	1000 V	1600 V	2000 V	1600 V monitor type	2000 V monitor type	2500 V monitor type
375	loose in box	lead length 5.0 ± 1.0 mm	± 5 %	14	24	34	44	64	74	84
		lock lead 4.0 + 1.0/- 0.5 mm	± 5 %	90	90	90	90	90	90	90
	taped on reel (bent back)	H = 16.0 mm; P <sub>0</sub> = 15.0 mm; reel diameter 500 mm	± 5 %	16	26	36	46	66	-	-
dimensions of this code numbers stays between brackets										
<b>ON REQUEST</b>										
375	loose in box	lead length 5.0 ± 1.0 mm	± 3.5 %	15	25	35	45	65	75	85
		lead length 3.5 ± 0.5 mm	± 5 %	10	20	30	40	60	70	80
			± 3.5 %	11	21	31	41	61	71	81
	taped on reel	H = 16.0 mm; P <sub>0</sub> = 12.7 mm; reel diameter = 500 mm	± 5 %	12	22	32	42	62	72	82
			± 3.5 %	13	23	33	43	63	73	83
	taped on reel (bent back)	H = 16.0 mm; P <sub>0</sub> = 15.0 mm; reel diameter = 500 mm	± 3.5 %	17	27	37	47	67	-	-
dimensions of this code numbers stays between brackets										
		H = 16.0 mm; P <sub>0</sub> = 15.0 mm; reel diameter = 356 mm	± 5 %	18	28	38	48	68	-	-

SPECIFIC REFERENCE DATA (630 VDC)

DESCRIPTION	VALUE	
Tangent of loss angle: Pitch = 10 mm, 15 mm and 7.5 mm (bent back) Pitch = 22.5 mm Pitch = 27.5 mm	at 10 kHz	at 100 kHz
	≤ 6 × 10 <sup>-4</sup>	≤ 10 × 10 <sup>-4</sup>
	≤ 8 × 10 <sup>-4</sup>	≤ 15 × 10 <sup>-4</sup>
	≤ 8 × 10 <sup>-4</sup>	≤ 20 × 10 <sup>-4</sup>
Rated voltage pulse slope (dU/dt): Pitch = 10 mm Pitch = 15 mm and 7.5 mm (bent back) Pitch = 22.5 mm Pitch = 27.5 mm	15000 V/μs	
	8000 V/μs	
	2800 V/μs	
	1900 V/μs	
R between leads at 500 V; 1 minute	> 100000 MΩ	
R between interconnected leads and case; 500 V; 1 minute	> 100000 MΩ	
Ionization (AC) voltage (typical value) at 50 pC peak discharge	> 400 V	
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	1008 V; 1 minute	
Withstanding (DC) voltage between leads and case	2840 V; 1 minute	

$U_{Rdc} = 630 V$ ;  $U_{Rac} = 300 V$ ;  $U_{p-p} = 850 V$  (standard)

CATALOG NUMBER 2222 375 ..... AND PACKAGING								
C (pF)	DIMENSIONS $W_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	LOOSE IN BOX		REEL			
			$l_t = 5.0 \pm 1.0$ mm	all leads	REEL $\varnothing$ 500 mm		REEL $\varnothing$ 356 mm	REEL $\varnothing$ 500 mm
			C-tol = $\pm 5$ %	SPQ	C-tol = $\pm 5$ %	SPQ	SPQ	SPQ
			last 5 digits of catalog number		last 5 digits of catalog number			
	pitch = $10.0 \pm 0.4$ mm; $d_t = 0.60 \pm 0.06$ mm				pitch = 7.5 mm (bent back)			pitch = 10.0 mm
680 750	5.0 × 13.0 × 14.5	0.65 0.65	14681 14751	2000				1200
820 910 1000 1100 1200 1300 1500 1600	5.5 × 13.5 × 14.5	0.70 0.70 0.70 0.75 0.75 0.75 0.80 0.85	14821 14911 14102 14112 14122 14132 14152 14162	2000				1100
1800 2000 2200 2400	6.0 × 14.0 × 14.5	0.80 0.85 0.90 1.0	14182 14202 14222 14242	1750				1000
2700	6.5 × 14.5 × 14.5	1.1	14272	1500				900
	pitch = $15.0 \pm 0.4$ mm; $d_t = 0.80 \pm 0.08$ mm				pitch = 7.5 mm (bent back)			pitch = 15.0 mm
3000 3300	5.0 × 14.0 (15.5) × 18.5	1.0	14302 14332	2000	16302 16332	1000	550	1200
3600 3900 4300 4700 5100 5600	5.5 × 14.5 (16.0) × 18.5	1.1	14362 14392 14432 14472 14512 14562	2000	16362 16392 16432 16472 16512 16562	900	500	1100
6200 6800 7500 8200 9100 10000 11000 12000 13000 15000 16000	6.0 × 15.0 (16.5) × 18.5	1.2	14622 14682 14752 14822 14912 14103 14113 14123 14133 14153 14163	2000	16622 16682 16752 16822 16912 16103 16113 16123 16133 16153 16163	800	450	1000
18000 20000	6.5 × 15.5 (17.0) × 18.5	1.3	14183 14203	1500	16183 16203	750	400	900
22000	7.0 × 16.0 (17.5) × 18.5	1.5	14223	1500	16223	700	400	800
24000	7.5 × 16.5 (18.0) × 18.5	1.6	14243	1250	16243	650	350	800
27000 30000	8.0 × 17.0 (18.5) × 18.5	1.9	14273 14303	1250	16273 16303	600	350	750
33000	8.5 × 17.5 (19.0) × 18.5	2.0	14333	1000	16333	550	300	700
36000 39000	9.5 × 18.5 (20.0) × 18.5	2.3	on request	900	on request	500	300	600



AC and Pulse Polypropylene  
Film Capacitors KP/MKP  
Radial Epoxy Lacquered Type

Vishay BCcomponents

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING				
			LOOSE IN BOX		REEL		
			$l_t = 5.0 \pm 1.0$ mm	all leads	REEL $\varnothing$ 500 mm	REEL $\varnothing$ 356 mm	REEL $\varnothing$ 500 mm
			C-tol = $\pm 5$ %	SPQ	C-tol = $\pm 5$ %	SPQ	SPQ
last 5 digits of catalog number	last 5 digits of catalog number	SPQ					
<b>C (<math>\mu</math>F)</b>	<b>pitch = 22.5 <math>\pm</math> 0.4 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>		<b>pitch = 7.5 mm (bent back)</b>		<b>pitch = 22.5 mm</b>		
0.036	7.0 $\times$ 20.0 $\times$ 26.0	2.7	14363	650	550		
0.039			14393				
0.043			14433				
0.047			14473				
0.051			14513				
0.056			14563				
0.062			14623				
0.068	7.5 $\times$ 20.5 $\times$ 26.0	3.0	14683	600		500	
0.075	8.0 $\times$ 21.0 $\times$ 26.0	3.3	14753	550		500	
0.082			14823				
0.091	8.5 $\times$ 21.5 $\times$ 26.0	3.8	14913	500		450	
0.1	9.0 $\times$ 22.0 $\times$ 26.0	4.0	14104	450		450	
0.11	9.5 $\times$ 22.5 $\times$ 26.0	4.3	14114	400		400	
0.12	10.0 $\times$ 23.0 $\times$ 26.0	4.7	14124	400		400	
<b>C (<math>\mu</math>F)</b>	<b>pitch = 27.5 <math>\pm</math> 0.5 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>		<b>pitch = 7.5 mm (bent back)</b>		<b>pitch = 27.5 mm</b>		
0.13	9.5 $\times$ 22.5 $\times$ 30.0	4.7	14134	500			
0.15	10.0 $\times$ 23.0 $\times$ 30.0	5.2	14154	500			
0.16	10.5 $\times$ 23.5 $\times$ 30.0	5.5	14164	450			
0.18	11.0 $\times$ 24.0 $\times$ 30.0	6.0	14184	400			
0.2	11.5 $\times$ 24.5 $\times$ 30.0	6.6	14204	400			
0.22	12.5 $\times$ 25.5 $\times$ 30.0	7.1	14224	350			
0.24	13.0 $\times$ 26.0 $\times$ 30.0	7.7	14244	300			
0.27	13.5 $\times$ 26.5 $\times$ 30.0	8.5	14274	300			

$U_{Rdc} = 630$  V;  $U_{Rac} = 300$  V;  $U_{p-p} = 850$  V (lock lead)

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING	
			LOOSE IN BOX	
			$l_t = 4.0 + 1.0/- 0.5$ mm	
			C-tol = $\pm 5$ %	SPQ
last 5 digits of catalog number				
<b>C (pF)</b>	<b>pitch = 10.0 <math>\pm</math> 1.0 mm; <math>d_t = 0.60 \pm 0.06</math> mm</b>			
680	5.0 $\times$ 16.0 $\times$ 14.5	0.65	90308	2000
750		0.65	90309	
820	5.5 $\times$ 16.5 $\times$ 14.5	0.70	90311	2000
910		0.70	90312	
1000		0.70	90313	
1100		0.75	90314	
1200		0.75	90315	
1300		0.75	90316	
1500		0.80	90317	
1600		0.85	90318	
1800	6.0 $\times$ 17.0 $\times$ 14.5	0.80	90319	1750
2000		0.85	90321	
2200		0.90	90322	
2400		1.0	90323	
2700	6.5 $\times$ 17.5 $\times$ 14.5	1.1	90324	1500

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING	
			LOOSE IN BOX	
			$l_t = 4.0 + 1.0/- 0.5$ mm	
			C-tol = $\pm 5$ %	SPQ
			last 5 digits of catalog number	
<b>C (pF)</b>	<b>pitch = 15.0 <math>\pm</math> 1.0 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>			
3000 3300	5.0 $\times$ 17.0 $\times$ 18.5	1.0	90325 90326	2000
3600 3900 4300 4700 5100 5600	5.5 $\times$ 17.5 $\times$ 18.5	1.1	90327 90328 90329 90331 90332 90333	2000
6200 6800 7500 8200 9100 10000 11000 12000 13000 15000 16000	6.0 $\times$ 18.0 $\times$ 18.5	1.3	90334 90335 90336 90337 90338 90339 90236 90341 90342 90343 90344	2000
18000 20000	6.5 $\times$ 18.5 $\times$ 18.5	1.4	90218 90345	1750
22000	7.0 $\times$ 19.0 $\times$ 18.5	1.5	90219	1500
24000	7.5 $\times$ 19.5 $\times$ 18.5	1.7	90221	1400
27000 30000	8.0 $\times$ 20.0 $\times$ 18.5	1.9	90223 90346	1250
33000	8.5 $\times$ 20.5 $\times$ 18.5	2.0	90347	1200
36000 39000	9.5 $\times$ 21.5 $\times$ 18.5	2.3	on request	1000
<b>C (<math>\mu</math>F)</b>	<b>pitch = 22.5 <math>\pm</math> 1.0 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>			
0.036 0.039 0.043 0.047 0.051 0.056 0.062	7.0 $\times$ 23.0 $\times$ 26.0	2.7	90348 90349 90351 90352 90353 90354 90355	600
0.068	7.5 $\times$ 23.5 $\times$ 26.0	3.0	90356	550
0.075 0.082	8.0 $\times$ 24.0 $\times$ 26.0	3.3	90357 90358	500
0.091	8.5 $\times$ 24.5 $\times$ 26.0	3.8	90359	450
0.1	9.0 $\times$ 25.0 $\times$ 26.0	4.0	90361	450
0.11	9.5 $\times$ 25.5 $\times$ 26.0	4.3	90362	400
0.12	10.0 $\times$ 26.0 $\times$ 26.0	4.7	90363	350
<b>C (<math>\mu</math>F)</b>	<b>pitch = 27.5 <math>\pm</math> 1.0 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>			
0.13	9.5 $\times$ 25.5 $\times$ 30.0	4.7	90364	450
0.15	10.0 $\times$ 26.0 $\times$ 30.0	5.2	90365	400
0.16	10.5 $\times$ 26.5 $\times$ 30.0	5.5	90366	350
0.18	11.0 $\times$ 27.0 $\times$ 30.0	6.0	90367	350
0.2	11.5 $\times$ 27.5 $\times$ 30.0	6.6	90368	350



AC and Pulse Polypropylene  
Film Capacitors KP/MKP  
Radial Epoxy Lacquered Type

Vishay BCcomponents

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING	
			LOOSE IN BOX	
			$l_t = 4.0 + 1.0/- 0.5$ mm	
			C-tol = $\pm 5$ %	SPQ
last 5 digits of catalog number				
0.22	12.5 × 28.5 × 30.0	7.1	90369	300
0.24	13.0 × 29.0 × 30.0	7.7	90371	250
0.27	13.5 × 29.5 × 30.0	8.5	90372	250

SPECIFIC REFERENCE DATA (1000 VDC)

DESCRIPTION	VALUE	
Tangent of loss angle: Pitch = 10 mm, 15 mm and 7.5 mm (bent back) Pitch = 22.5 mm Pitch = 27.5 mm	at 10 kHz	at 100 kHz
	$\leq 6 \times 10^{-4}$	$\leq 10 \times 10^{-4}$
	$\leq 6 \times 10^{-4}$	$\leq 10 \times 10^{-4}$
Rated voltage pulse slope (dU/dt) <sub>R</sub> : Pitch = 10 mm Pitch = 15 mm and 7.5 mm (bent back) Pitch = 22.5 mm Pitch = 27.5 mm	27000 V/μs	
	15000 V/μs	
	5000 V/μs	
	3300 V/μs	
R between leads at 500 V; 1 minute	> 100000 MΩ	
R between interconnected leads and case; 500 V; 1 minute	> 100000 MΩ	
Ionization (AC) voltage (typical value) at 50 pC peak discharge	> 500 V	
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s: for C ≤ 47 nF for C > 47 nF	1600 V; 1 minute	
	1200 V; 1 minute	
Withstanding (DC) voltage between leads and case	2840 V; 1 minute	

$U_{Rdc} = 1000$  V;  $U_{Rac} = 400$  V;  $U_{p-p} = 1000$  V (standard)

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING				
			LOOSE IN BOX		REEL		
			$l_t = 5.0 \pm 1.0$ mm	all leads	REEL Ø 500 mm	REEL Ø 356 mm	REEL Ø 500 mm
			C-tol = $\pm 5$ %	SPQ	C-tol = $\pm 5$ %	SPQ	SPQ
last 5 digits of catalog number	last 5 digits of catalog number	SPQ					
C (pF)	pitch = $10.0 \pm 0.4$ mm; $d_t = 0.60 \pm 0.06$ mm		pitch = 7.5 mm (bent back)		pitch = 10.0 mm		
100	5.0 × 13.0 × 14.5	0.50	24101	2000			
110			24111				
120			24121				
130			24131				

CATALOG NUMBER 2222 375 ..... AND PACKAGING								
DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	LOOSE IN BOX		REEL				
		$l_t = 5.0 \pm 1.0$ mm	all leads	REEL $\varnothing$ 500 mm		REEL $\varnothing$ 356 mm	REEL $\varnothing$ 500 mm	
		C-tol = $\pm 5$ %	SPQ	C-tol = $\pm 5$ %	SPQ	SPQ	SPQ	
		last 5 digits of catalog number		last 5 digits of catalog number				
150 160 180 200 220 240 270 300 330 360 390 430 470 510 560 620 680 750 820 910	0.55 0.55 0.55 0.55 0.60 0.60 0.60 0.60 0.60 0.60 0.60 0.65 0.70 0.75 0.75 0.80 0.80 0.80 0.70 0.70 0.70	24151 24161 24181 24201 24221 24241 24271 24301 24331 24361 24391 24431 24471 24511 24561 24621 24681 24751 24821 24911	2000					1100
1000 1100 1200 1300 1500	0.75 0.85 0.90 0.85 0.90	24102 24112 24122 24132 24152	1750					1000
<b>C (pF)</b>	<b>pitch = 15.0 <math>\pm</math> 0.4 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>			<b>pitch = 7.5 mm (bent back)</b>			<b>pitch = 15.0 mm</b>	
1600 1800 2000 2200 2400	5.5 $\times$ 14.5 (16.0) $\times$ 18.5	1.1	24162 24182 24202 24222 24242	2000	26162 26182 26202 26222 26242	900	500	1100
2700 3000 3300 3600 3900	6.0 $\times$ 15.0 (16.5) $\times$ 18.5	1.2	24272 24302 24332 24362 24392	2000	26272 26302 26332 26362 26392	800	450	1000
4300 4700 5100 5600 6200 6800	6.0 $\times$ 15.0 (16.5) $\times$ 18.5	1.2	24432 24472 24512 24562 24622 24682	2000	26432 26472 26512 26562 26622 26682	800	450	1000
7500 8200 9100	7.0 $\times$ 16.0 (17.5) $\times$ 18.5	1.4	24752 24822 24912	1500	26752 26822 26912	700	400	800
10000 11000 12000	7.5 $\times$ 16.5 (18.0) $\times$ 18.5	1.6	24103 24113 24123	1250	26103 26113 26123	650	350	800
13000	8.5 $\times$ 17.5 (19.0) $\times$ 18.5	1.9	24133	1000	26133	550	300	700



AC and Pulse Polypropylene  
Film Capacitors KP/MKP  
Radial Epoxy Lacquered Type

Vishay BCcomponents

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING					
			LOOSE IN BOX		REEL			
			$l_t = 5.0 \pm 1.0$ mm	all leads	REEL $\varnothing$ 500 mm		REEL $\varnothing$ 356 mm	REEL $\varnothing$ 500 mm
			C-tol = $\pm 5\%$	SPQ	C-tol = $\pm 5\%$		SPQ	SPQ
last 5 digits of catalog number	last 5 digits of catalog number							
15000	9.0 × 18.0 (19.5) × 18.5	2.1	24153	1000	26153	550	300	650
<b>C (μF)</b>	<b>pitch = 22.5 ± 0.4 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>			<b>pitch = 7.5 mm (bent back)</b>			<b>pitch = 22.5 mm</b>	
0.016 0.018	6.0 × 19.0 × 26.0	2.2	24163 24183	800				650
0.02 0.022	6.5 × 19.5 × 26.0	2.5	24203 24223	750				600
0.024	7.0 × 20.0 × 26.0	2.7	24243	650				550
0.027 0.03	7.5 × 20.5 × 26.0	3.1	24273 24303	600				500
0.033	8.0 × 21.0 × 26.0	3.4	24333	550				500
0.036 0.039	8.5 × 21.5 × 26.0	3.7	24363 24393	500				450
0.043	9.0 × 22.0 × 26.0	4.1	24433	450				450
<b>C (μF)</b>	<b>pitch = 27.5 ± 0.5 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>			<b>pitch = 7.5 mm (bent back)</b>			<b>pitch = 27.5 mm</b>	
0.047	7.0 × 20.0 × 30.0	3.1	24473	1000				
0.051 0.056	7.5 × 20.5 × 30.0	3.4	24513 24563	750				
0.062	8.0 × 21.0 × 30.0	3.8	24623	650				
0.068	8.5 × 21.5 × 30.0	4.0	24683	550				
0.075	9.0 × 22.0 × 30.0	4.4	24753	550				
0.082	9.5 × 22.5 × 30.0	4.7	24823	500				
0.091	10.0 × 23.0 × 30.0	5.1	24913	500				
0.1	10.5 × 23.5 × 30.0	5.5	24104	450				
0.11	11.0 × 24.0 × 30.0	5.9	24114	400				
0.12	11.5 × 24.5 × 30.0	6.3	24124	400				
0.13	12.0 × 25.0 × 30.0	6.8	24134	350				
0.15	12.5 × 25.5 × 30.0	7.6	24154	350				

$U_{Rdc} = 1000$  V;  $U_{Rac} = 400$  V;  $U_{p-p} = 1000$  V (lock lead)

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING	
			LOOSE IN BOX	
			$l_t = 4.0 + 1.0/- 0.5$ mm	
			C-tol = $\pm 5\%$	SPQ
last 5 digits of catalog number				
<b>C (pF)</b>	<b>pitch = 10.0 ± 1.0 mm; <math>d_t = 0.60 \pm 0.06</math> mm</b>			
100 110 120 130	5.0 × 16.0 × 14.5	0.50	90373 90374 90375 90376	2000



	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING	
			LOOSE IN BOX	
			$l_t = 4.0 + 1.0/- 0.5$ mm	
			C-tol = $\pm 5$ %	SPQ
			last 5 digits of catalog number	
150	5.5 × 16.5 × 14.5	0.55	90377	2000
160		0.55	90378	
180		0.55	90379	
200		0.55	90381	
220		0.60	90382	
240		0.60	90383	
270		0.60	90384	
300		0.60	90385	
330		0.60	90386	
360		0.60	90387	
390		0.65	90388	
430		0.70	90389	
470		0.75	90391	
510		0.75	90392	
560		0.80	90393	
620		0.80	90394	
680		0.80	90395	
750		0.70	90396	
820	0.70	90397		
910	0.70	90398		
1000	6.0 × 17.0 × 14.5	0.75	90399	1750
1100		0.85	90401	
1200		0.90	90402	
1300		0.85	90403	
1500		0.90	90404	
<b>C (pF)</b>	<b>pitch = 15.0 ± 1.0 mm; d<sub>t</sub> = 0.80 ± 0.08 mm</b>			
1600	5.5 × 17.5 × 18.5	1.1	90405	2000
1800			90406	
2000			90407	
2200			90408	
2400			90409	
2700	6.0 × 18.0 × 18.5	1.2	90411	2000
3000			90412	
3300			90413	
3600			90414	
3900			90415	
4300			90416	
4700	90417			
5100	6.0 × 18.0 × 18.5	1.2	90418	2000
5600			90419	
6200			90421	
6800			90422	
7500	7.0 × 19.0 × 18.5	1.5	90232	1500
8200			90423	
9100			90424	
10000	7.5 × 19.5 × 18.5	1.6	90425	1400
11000	8.0 × 20.0 × 18.5	1.8	90426	1250
12000			90427	



AC and Pulse Polypropylene  
Film Capacitors KP/MKP  
Radial Epoxy Lacquered Type

Vishay BCcomponents

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING	
			LOOSE IN BOX	
			$l_t = 4.0 + 1.0/- 0.5$ mm	
			C-tol = $\pm 5\%$	SPQ
last 5 digits of catalog number				
13000	8.5 × 20.5 × 18.5	1.9	90428	1200
15000	9.0 × 21.0 × 18.5	2.1	90429	1100
<b>C (μF)</b>	<b>pitch = 22.5 ± 1.0 mm; d<sub>t</sub> = 0.80 ± 0.08 mm</b>			
0.016	6.0 × 22.0 × 26.0	2.2	90431	750
0.018			90432	
0.02	6.5 × 22.5 × 26.0	2.5	90433	700
0.022			90434	
0.024	7.0 × 23.0 × 26.0	2.7	90435	600
0.027	7.5 × 23.5 × 26.0	3.1	90436	550
0.03			90437	
0.033	8.0 × 24.0 × 26.0	3.4	90438	500
0.036	8.5 × 24.5 × 26.0	3.8	90439	450
0.039			90224	
0.043	9.0 × 25.0 × 26.0	4.1	90441	450
<b>C (μF)</b>	<b>pitch = 27.5 ± 1.0 mm; d<sub>t</sub> = 0.80 ± 0.08 mm</b>			
0.047	7.0 × 23.0 × 30.0	3.1	90442	800
0.051	7.5 × 23.5 × 30.0	3.4	90443	600
0.056			90444	
0.062	8.0 × 24.0 × 30.0	3.8	90445	550
0.068	8.5 × 24.5 × 30.0	4.0	90446	550
0.075	9.0 × 25.0 × 30.0	4.4	90447	450
0.082	9.5 × 25.5 × 30.0	4.7	90448	450
0.091	10.0 × 26.0 × 30.0	5.1	90449	400
0.1	10.5 × 26.5 × 30.0	5.5	90451	350
0.11	11.0 × 27.0 × 30.0	5.9	90452	350
0.12	11.5 × 27.5 × 30.0	6.3	90453	350
0.13	12.0 × 28.0 × 30.0	6.8	90454	300
0.15	12.5 × 28.5 × 30.0	7.6	90455	300

**SPECIFIC REFERENCE DATA (1600 VDC)**

DESCRIPTION	VALUE	
	at 10 kHz	at 100 kHz
Tangent of loss angle:		
Pitch = 15 mm and 7.5 mm (bent back)	$\leq 6 \times 10^{-4}$	$\leq 10 \times 10^{-4}$
Pitch = 22.5 mm	$\leq 6 \times 10^{-4}$	$\leq 10 \times 10^{-4}$
Pitch = 27.5 mm	$\leq 6 \times 10^{-4}$	$\leq 15 \times 10^{-4}$
Rated voltage pulse slope (dU/dt) <sub>R</sub> :		
Pitch = 15 mm and 7.5 mm (bent back)	21000 V/μs	
Pitch = 22.5 mm	7000 V/μs	
Pitch = 27.5 mm	4700 V/μs	
R between leads at 500 V; 1 minute	> 100000 MΩ	
R between interconnected leads and case; 500 V; 1 minute	> 100000 MΩ	
Ionization (AC) voltage (typical value) at 20 pC peak discharge	> 550 V	
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	2560 V; 1 minute	
Withstanding (DC) voltage between leads and case	2840 V; 1 minute	

$U_{Rdc} = 1600\text{ V}$ ;  $U_{Rac} = 500\text{ V}$ ;  $U_{p-p} = 1400\text{ V}$  (standard)

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING					
			LOOSE IN BOX		REEL			
			$l_t = 5.0 \pm 1.0\text{ mm}$	all leads	REEL $\varnothing$ 500 mm		REEL $\varnothing$ 356 mm	REEL $\varnothing$ 500 mm
			C-tol = $\pm 5\%$	SPQ	C-tol = $\pm 5\%$	SPQ	SPQ	SPQ
last 5 digits of catalog number	last 5 digits of catalog number							
<b>C (pF)</b>	<b>pitch = 15.0 <math>\pm</math> 0.4 mm; <math>d_t = 0.80 \pm 0.08\text{ mm}</math></b>			<b>pitch = 7.5 mm (bent back)</b>			<b>pitch 15.0 mm</b>	
680	5.5 $\times$ 14.5 (15.0) $\times$ 18.5	0.75	34681	2000	36681	900	500	1100
750			34751		36751			
820			34821		36821			
910	6.0 $\times$ 15.0 (15.5) $\times$ 18.5	0.80	34911	2000	36911	800	450	1000
1000		0.85	34102		36102			
1100		0.85	34112		36112			
1200		0.90	34122		36122			
1300		0.95	34132		36132			
1500	5.5 $\times$ 14.5 (16.0) $\times$ 18.5	1.1	34152	2000	36152	900	500	1100
1600			34162		36162			
1800	6.0 $\times$ 15.0 (16.5) $\times$ 18.5	1.2	34182	2000	36182	800	450	1000
2000	6.5 $\times$ 15.5 (17.0) $\times$ 18.5	1.3	34202	1500	36202	750	400	900
2200			34222		36222			
2400	7.0 $\times$ 16.0 (17.5) $\times$ 18.5	1.4	34242	1500	36242	700	400	800
2700	7.5 $\times$ 16.5 (18.0) $\times$ 18.5	1.4	34272	1250	36272	650	350	800
3000			34302		36302			
3300	8.0 $\times$ 17.0 (18.5) $\times$ 18.5	1.7	34332	1250	36332	600	350	750
3600	8.5 $\times$ 17.5 (19.0) $\times$ 18.5	1.8	34362	1000	36362	550	300	700
3900	9.0 $\times$ 18.0 (19.5) $\times$ 18.5	2.0	34392	1000	36392	550	300	650
4300			34432		36432			
<b>C (<math>\mu</math>F)</b>	<b>pitch = 22.5 <math>\pm</math> 0.4 mm; <math>d_t = 0.80 \pm 0.08\text{ mm}</math></b>			<b>pitch = 7.5 mm (bent back)</b>			<b>pitch = 22.5 mm</b>	
0.0047	6.0 $\times$ 19.0 $\times$ 26.0	2.0	34472	800				650
0.0051			34512					
0.0056			34562					
0.0062	6.5 $\times$ 19.5 $\times$ 26.0	2.1	34622	750				600
0.0068			34682					
0.0075	7.0 $\times$ 20.0 $\times$ 26.0	2.3	34752	650				550
0.0082			34822					
0.0091	7.5 $\times$ 20.5 $\times$ 26.0	2.5	34912	600				500
0.01	8.0 $\times$ 21.0 $\times$ 26.0	2.6	34103	550				500
0.011	8.5 $\times$ 21.5 $\times$ 26.0	2.9	34113	500				450
0.012			34123					
0.013	9.0 $\times$ 22.0 $\times$ 26.0	3.1	34133	450				450
0.015	9.5 $\times$ 22.5 $\times$ 26.0	3.5	34153	400				400
0.016	10.0 $\times$ 23.0 $\times$ 26.0	3.6	34163	400				400
0.018	10.5 $\times$ 23.5 $\times$ 26.0	4.0	34183	350				350



AC and Pulse Polypropylene  
Film Capacitors KP/MKP  
Radial Epoxy Lacquered Type

Vishay BCcomponents

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING				
			LOOSE IN BOX		REEL		
			$l_t = 5.0 \pm 1.0$ mm	all leads	REEL $\varnothing$ 500 mm	REEL $\varnothing$ 356 mm	REEL $\varnothing$ 500 mm
			C-tol = $\pm 5$ %	SPQ	C-tol = $\pm 5$ %	SPQ	SPQ
last 5 digits of catalog number	last 5 digits of catalog number	SPQ					
<b>C (<math>\mu</math>F)</b>	<b>pitch = 27.5 <math>\pm</math> 0.5 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>		<b>pitch = 7.5 mm (bent back)</b>		<b>pitch = 27.5 mm</b>		
0.02	9.0 $\times$ 22.0 $\times$ 30.0	4.2	34203	550			
0.022	9.5 $\times$ 22.5 $\times$ 30.0	4.4	34223	500			
0.024	10.0 $\times$ 23.0 $\times$ 30.0	4.7	34243	500			
0.027	10.5 $\times$ 23.5 $\times$ 30.0	5.2	34273	450			
0.03	11.0 $\times$ 24.0 $\times$ 30.0	5.6	34303	400			
0.033	11.5 $\times$ 24.5 $\times$ 30.0	6.0	34333	400			
0.036	12.0 $\times$ 25.0 $\times$ 30.0	6.5	34363	350			
0.039	12.5 $\times$ 25.5 $\times$ 30.0	6.9	34393	350			

$U_{Rdc} = 1600$  V;  $U_{Rac} = 500$  V;  $U_{p-p} = 1400$  V (lock lead)

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING	
			LOOSE IN BOX	
			$l_t = 4.0 + 1.0/- 0.5$ mm	
			C-tol = $\pm 5$ %	SPQ
last 5 digits of catalog number				
<b>C (pF)</b>	<b>pitch = 15.0 <math>\pm</math> 1.0 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>			
680	5.5 $\times$ 17.5 $\times$ 18.5	0.75	90456	2000
750			90457	
820			90458	
910	6.0 $\times$ 18.0 $\times$ 18.5	0.80	90459	2000
1000		0.85	90461	
1100		0.85	90462	
1200		0.90	90463	
1300		0.95	90464	
1500	5.5 $\times$ 17.5 $\times$ 18.5	1.1	90465	2000
1600			90466	
1800	6.0 $\times$ 18.0 $\times$ 18.5	1.2	90467	2000
2000	6.5 $\times$ 18.5 $\times$ 18.5	1.3	90468	1750
2200			90469	
2400	7.0 $\times$ 19.0 $\times$ 18.5	1.4	90471	1500
2700	7.5 $\times$ 19.5 $\times$ 18.5	1.6	90472	1400
3000			90473	
3300	8.0 $\times$ 20.0 $\times$ 18.5	1.9	90141	1250
3600	8.5 $\times$ 20.5 $\times$ 18.5	2.3	90142	1200
3900	9.0 $\times$ 21.0 $\times$ 18.5	2.5	90143	1100
4300			90144	
<b>C (<math>\mu</math>F)</b>	<b>pitch = 22.5 <math>\pm</math> 1.0 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>			
0.0047	6.0 $\times$ 22.0 $\times$ 26.0	2.4	90145	750
0.0051			90146	
0.0056			90147	
0.0062	6.5 $\times$ 22.5 $\times$ 26.0	2.6	90148	700
0.0068			90149	
0.0075	7.0 $\times$ 23.0 $\times$ 26.0	2.8	90151	600
0.0082			90152	
0.0083			90202	
0.0091			90153	

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING	
			LOOSE IN BOX	
			$l_t = 4.0 + 1.0/- 0.5$ mm	
			C-tol = $\pm 5$ %	SPQ
last 5 digits of catalog number				
0.01	8.0 × 24.0 × 26.0	3.2	90154	500
0.011	8.5 × 24.5 × 26.0	3.4	90155	450
0.012			90156	
0.013	9.0 × 25.0 × 26.0	3.6	90157	450
0.015	9.5 × 25.5 × 26.0	4.0	90158	400
0.016	10.0 × 26.0 × 26.0	4.3	90159	350
0.018	10.5 × 26.5 × 26.0	4.7	90161	350
<b>C (μF)</b>	<b>pitch = 27.5 ± 1.0 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>			
0.02	9.0 × 25.0 × 30.0	4.2	90474	450
0.022	9.5 × 25.5 × 30.0	4.4	90475	450
0.024	10.0 × 26.0 × 30.0	4.7	90476	400
0.027	10.5 × 26.5 × 30.0	5.2	90477	350
0.03	11.0 × 27.0 × 30.0	5.6	90478	350
0.033	11.5 × 27.5 × 30.0	6.0	90479	350
0.036	12.0 × 28.0 × 30.0	6.5	90481	300
0.039	12.5 × 28.5 × 30.0	6.9	90482	300

**SPECIFIC REFERENCE DATA (2000 VDC)**

DESCRIPTION	VALUE	
Tangent of loss angle:	at 10 kHz	at 100 kHz
Pitch = 15 mm and 7.5 mm (bent back)	$\leq 6 \times 10^{-4}$	$\leq 10 \times 10^{-4}$
Pitch = 22.5 mm	$\leq 6 \times 10^{-4}$	$\leq 10 \times 10^{-4}$
Pitch = 27.5 mm	$\leq 6 \times 10^{-4}$	$\leq 15 \times 10^{-4}$
Rated voltage pulse slope (dU/dt) <sub>R</sub> :		
Pitch = 15 mm and 7.5 mm (bent back)	30000 V/μs	
Pitch = 22.5 mm	10000 V/μs	
Pitch = 27.5 mm	6700 V/μs	
R between leads at 500 V; 1 minute	> 100000 MΩ	
R between interconnected leads and case; 500 V; 1 minute	> 100000 MΩ	
Ionization (AC) voltage (typical value) at 20 pC peak discharge	> 600 V	
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	3200 V; 1 minute	
Withstanding (DC) voltage between leads and case	2840 V; 1 minute	

**$U_{Rdc} = 2000$  V;  $U_{Rac} = 600$  V;  $U_{p-p} = 1700$  V (standard)**

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING					
			LOOSE IN BOX		REEL			
			$l_t = 5.0 \pm 1.0$ mm	all leads	REEL Ø 500 mm		REEL Ø 356 mm	REEL Ø 500 mm
			C-tol = $\pm 5$ %	SPQ	C-tol = $\pm 5$ %	SPQ	SPQ	SPQ
last 5 digits of catalog number	last 5 digits of catalog number							
<b>C (pF)</b>	<b>pitch = 15.0 ± 0.4 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>		<b>pitch = 7.5 mm (bent back)</b>			<b>pitch = 15.0 mm</b>		
100	5.5 × 14.5 (15.0) × 18.5	0.75	44101	2000	46101	900	500	1100
110		0.75	44111		46111			
120		0.75	44121		46121			
130		0.75	44131		46131			
150		0.75	44151		46151			



AC and Pulse Polypropylene  
Film Capacitors KP/MKP  
Radial Epoxy Lacquered Type

Vishay BCcomponents

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING																										
			LOOSE IN BOX		REEL																								
			$l_t = 5.0 \pm 1.0$ mm	all leads	REEL $\varnothing$ 500 mm		REEL $\varnothing$ 356 mm	REEL $\varnothing$ 500 mm																					
			C-tol = $\pm 5$ %		C-tol = $\pm 5$ %																								
			last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ	SPQ	SPQ																					
160	5.5 × 14.5 (15.0) × 18.5	0.75	44161	2000	46161	900	500	1100																					
180		0.75	44181		46181																								
200		0.75	44201		46201																								
220		0.75	44221		46221																								
240		0.75	44241		46241																								
270		0.75	44271		46271																								
300		0.75	44301		46301																								
330		0.75	44331		46331																								
360		0.75	44361		46361																								
390		0.75	44391		46391																								
430		0.75	44431		46431																								
470		0.80	44471		46471																								
510		0.80	44511		46511																								
560		0.80	44561		46561																								
620	6.0 × 15.0 (15.5) × 18.5	0.85	44621	2000	46621	800	450	1000																					
680		0.85	44681		46681																								
750		0.90	44751		46751																								
820	6.5 × 15.5 (16.0) × 18.5	0.95	44821	1500	46821	750	400	900																					
910	5.5 × 14.5 (16.0) × 18.5	1.1	44911	2000	46911	900	500	1100																					
1000	6.0 × 15.0 (16.5) × 18.5	1.2	44102	2000	46102	800	450	1000																					
1100			44112		46112																								
1200			44122		46122																								
1300	6.5 × 15.5 (17.0) × 18.5	1.3	44132	1500	46132	750	400	900																					
1500	7.0 × 16.0 (17.5) × 18.5	1.4	44152	1500	46152	700	400	800																					
1600	7.5 × 16.5 (18.0) × 18.5	1.5	44162	1250	46162	650	350	800																					
1800			44182		46182																								
2000	8.0 × 17.0 (18.5) × 18.5	1.6	44202	1250	46202	600	350	750																					
2200	8.5 × 17.5 (19.0) × 18.5	1.7	44222	1000	46222	550	300	700																					
2400	9.0 × 18.0 (19.5) × 18.5	1.8	44242	1000	46242	550	300	650																					
2700	9.5 × 18.5 (20.0) × 18.5	2.0	44272	900	46272	500	300	600																					
<b>C (μF)</b>	<b>pitch = 22.5 ± 0.4 mm; d<sub>t</sub> = 0.80 ± 0.08 mm</b>				<b>pitch = 7.5 mm (bent back)</b>			<b>pitch = 22.5 mm</b>																					
0.003	6.0 × 19.0 × 26.0	2.1	44302	800				650																					
0.0033			44332																										
0.0036			44362																										
0.0039			44392																										
0.0043	6.5 × 19.5 × 26.0	2.3	44432	750							600																		
0.0047			44472																										
0.0051	7.0 × 20.0 × 26.0	2.6	44512	650										550															
0.0056			44562																										
0.0062	7.5 × 20.5 × 26.0	2.8	44622	600													500												
0.0068	8.0 × 21.0 × 26.0	3.0	44682	550																500									
0.0075			44752																										
0.0082	8.5 × 21.5 × 26.0	3.3	44822	500																			450						
0.0091	9.0 × 22.0 × 26.0	3.6	44912	450																						450			
0.01	9.5 × 22.5 × 26.0	3.8	44103	400																									400
<b>C (μF)</b>	<b>pitch = 27.5 ± 0.5 mm; d<sub>t</sub> = 0.80 ± 0.08 mm</b>				<b>pitch = 7.5 mm (bent back)</b>			<b>pitch = 27.5 mm</b>																					
0.011	9.0 × 22.0 × 30.0	3.8	44113	550																									
0.012	9.5 × 22.5 × 30.0	4.1	44123	500																									
0.013	10.0 × 23.0 × 30.0	4.4	44133	500																									
0.015	10.5 × 23.5 × 30.0	4.9	44153	450																									

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING				
			LOOSE IN BOX		REEL		
			$l_t = 5.0 \pm 1.0$ mm	all leads	REEL $\varnothing$ 500 mm	REEL $\varnothing$ 356 mm	REEL $\varnothing$ 500 mm
			C-tol = $\pm 5$ %	SPQ	C-tol = $\pm 5$ %	SPQ	SPQ
last 5 digits of catalog number	last 5 digits of catalog number						
0.016	11.0 × 24.0 × 30.0	5.1	44163	400			
0.018	11.5 × 24.5 × 30.0	5.6	44183	400			
0.02	12.5 × 25.5 × 30.0	6.1	44203	350			
0.022	13.0 × 26.0 × 30.0	6.5	44223	300			

$U_{Rdc} = 2000$  V;  $U_{Rac} = 600$  V;  $U_{p-p} = 1700$  V (lock lead)

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING	
			LOOSE IN BOX	
			$l_t = 4.0 + 1.0/- 0.5$ mm	
			C-tol = $\pm 5$ %	SPQ
last 5 digits of catalog number				
<b>C (pF)</b>	<b>pitch = 15.0 ± 1.0 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>			
100	5.5 × 17.5 × 18.5	0.75	90483	2000
110		0.75	90484	
120		0.75	90485	
130		0.75	90486	
150		0.75	90487	
160		0.75	90488	
180		0.75	90489	
200		0.75	90491	
220		0.75	90276	
240		0.75	90492	
270		0.75	90493	
300		0.75	90494	
330		0.75	90495	
360		0.75	90496	
390		0.75	90188	
430		0.75	90497	
470		0.80	90498	
510	0.80	90499		
560	0.80	90501		
620	6.0 × 18.0 × 18.5	0.85	90502	2000
680		0.85	90229	
750		0.90	90503	
820	6.5 × 18.5 × 18.5	0.95	90504	1750
910	5.5 × 17.5 × 18.5	1.1	90505	2000
1000	6.0 × 18.0 × 18.5	1.3	90225	2000
1100			90506	
1200			90226	
1300	6.5 × 18.5 × 18.5	1.3	90507	1750
1500	7.0 × 19.0 × 18.5	1.5	90266	1500
1600	7.5 × 19.5 × 18.5	1.7	90508	1400
1800			90237	
2000	8.0 × 20.0 × 18.5	1.7	90509	1250
2200	8.5 × 20.5 × 18.5	2.3	90227	1200



AC and Pulse Polypropylene  
Film Capacitors KP/MKP  
Radial Epoxy Lacquered Type

Vishay BCcomponents

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING	
			LOOSE IN BOX	
			$l_t = 4.0 + 1.0/- 0.5$ mm	
			C-tol = $\pm 5$ %	SPQ
last 5 digits of catalog number				
2400	9.0 × 21.0 × 18.5	1.8	90511	1100
2700	9.5 × 21.5 × 18.5	2.7	90228	1000
<b>C (μF)</b>	<b>pitch = 22.5 ± 1.0 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>			
0.003	6.0 × 22.0 × 26.0	2.2	90512	750
0.0033			90162	
0.0036			90163	
0.0039			90164	
0.0043	6.5 × 22.5 × 26.0	2.4	90165	700
0.0047			90166	
0.0051	7.0 × 23.0 × 26.0	2.6	90167	600
0.0056			90168	
0.0062	7.5 × 23.5 × 26.0	2.8	90169	550
0.0068	8.0 × 24.0 × 26.0	3.0	90171	500
0.0075			90172	
0.0082	8.5 × 24.5 × 26.0	3.2	90173	450
0.0091	9.0 × 25.0 × 26.0	3.5	90174	450
0.01	9.5 × 25.5 × 26.0	3.8	90175	400
<b>C (μF)</b>	<b>pitch = 27.5 ± 1.0 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>			
0.011	9.0 × 25.0 × 30.0	4.4	90176	450
0.012	9.5 × 25.5 × 30.0	4.6	90177	450
0.013	10.0 × 26.0 × 30.0	5.0	90178	400
0.015	10.5 × 26.5 × 30.0	5.4	90179	350
0.016	11.0 × 27.0 × 30.0	5.8	90181	350
0.018	11.5 × 27.5 × 30.0	6.2	90182	350
0.02	12.5 × 28.5 × 30.0	6.1	90513	300
0.022	13.0 × 29.0 × 30.0	6.5	90514	250

**SPECIFIC REFERENCE DATA (1600 VDC MONITOR)**

DESCRIPTION	VALUE	
	at 10 kHz	at 100 kHz
Tangent of loss angle:		
Pitch = 15 mm and 7.5 mm (bent back)	$\leq 6 \times 10^{-4}$	$\leq 10 \times 10^{-4}$
Pitch = 22.5 mm	$\leq 6 \times 10^{-4}$	$\leq 10 \times 10^{-4}$
Pitch = 27.5 mm	$\leq 6 \times 10^{-4}$	$\leq 15 \times 10^{-4}$
Rated voltage pulse slope (dU/dt) <sub>R</sub> :		
Pitch = 15 mm and 7.5 mm (bent back)	21000 V/μs	
Pitch = 22.5 mm	7000 V/μs	
Pitch = 27.5 mm	4700 V/μs	
R between leads at 500 V; 1 minute	> 100000 MΩ	
R between interconnected leads and case; 500 V; 1 minute	> 100000 MΩ	
Ionization (AC) voltage (typical value) at 20 pC peak discharge	> 550 V	
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	2560 V; 1 minute	
Withstanding (DC) voltage between leads and case	2840 V; 1 minute	



$U_{Rdc} = 1600\text{ V}$ ;  $U_{Rac} = 500\text{ V}$ ;  $U_{p-p} = 1400\text{ V}$  (monitor standard)

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING					
			LOOSE IN BOX		REEL			
			$l_t = 5.0 \pm 1.0\text{ mm}$	all leads	REEL $\varnothing$ 500 mm		REEL $\varnothing$ 356 mm	REEL $\varnothing$ 500 mm
			C-tol = $\pm 5\%$	SPQ	C-tol = $\pm 5\%$	SPQ	SPQ	SPQ
last 5 digits of catalog number	last 5 digits of catalog number							
<b>C (pF)</b>	pitch = $15.0 \pm 0.4\text{ mm}$ ; $d_t = 0.80 \pm 0.08\text{ mm}$			pitch = 7.5 mm (bent back)			pitch = 15.0 mm	
1000	$7.5 \times 16.5 (18.0) \times 18.5$	1.6	64102	1250	66102	650	350	800
1100	$8.0 \times 17.0 (18.5) \times 18.5$	1.7	64112	1250	66112	600	350	750
1200			64122		66122			
1300	$8.5 \times 17.5 (19.0) \times 18.5$	1.8	64132	1000	66132	550	300	700
1500	$9.0 \times 18.0 (19.5) \times 18.5$	2.0	64152	1000	66152	550	300	650
1600	$9.5 \times 18.5 (20.0) \times 18.5$	2.3	64162	900	66162	500	300	600
<b>C (<math>\mu</math>F)</b>	pitch = $22.5 \pm 0.4\text{ mm}$ ; $d_t = 0.80 \pm 0.08\text{ mm}$			pitch = 7.5 mm (bent back)			pitch = 22.5 mm	
0.0018	$6.0 \times 19.0 \times 26.0$	2.0	64182	800				650
0.002			64202					
0.0022	$6.5 \times 19.5 \times 26.0$	2.1	64222	750				600
0.0024	$7.0 \times 20.0 \times 26.0$	2.3	64242	650				550
0.0027			64272					
0.003	$7.5 \times 20.5 \times 26.0$	2.5	64302	600				500
0.0033	$8.0 \times 21.0 \times 26.0$	2.6	64332	550				500
0.0036			64362					
0.0039			64392					
0.0043	$8.5 \times 21.5 \times 26.0$	2.9	64432	500				450
0.0047			64472					
0.0051			64512					
0.0056			64562					
0.0062	$9.0 \times 22.0 \times 26.0$	3.1	64622	450				450
0.0068	$9.5 \times 22.5 \times 26.0$	3.5	64682	450	400			
0.0075	$10.0 \times 23.0 \times 26.0$	3.6	64752	400	400			
0.0082	$10.5 \times 23.5 \times 26.0$	4.0	64822	350	350			

$U_{Rdc} = 1600\text{ V}$ ;  $U_{Rac} = 500\text{ V}$ ;  $U_{p-p} = 1400\text{ V}$  (monitor lock lead)

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING	
			LOOSE IN BOX	
			$l_t = 4.0 + 1.0/- 0.5\text{ mm}$	
			C-tol = $\pm 5\%$	SPQ
last 5 digits of catalog number				
<b>C (pF)</b>	pitch = $15.0 \pm 0.4\text{ mm}$ ; $d_t = 0.80 \pm 0.08\text{ mm}$			
1000	$7.5 \times 19.5 \times 18.5$	1.6	90646	1400
1100	$8.0 \times 20.0 \times 18.5$	1.7	90647	1250
1200			90648	
1300	$8.5 \times 20.5 \times 18.5$	1.8	90649	1200
1500	$9.0 \times 21.0 \times 18.5$	2.0	90651	1100
1600	$9.5 \times 21.5 \times 18.5$	2.3	90652	1000



AC and Pulse Polypropylene  
Film Capacitors KP/MKP  
Radial Epoxy Lacquered Type

Vishay BCcomponents

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING	
			LOOSE IN BOX	
			$l_t = 4.0 + 1.0/- 0.5$ mm	
			C-tol = $\pm 5$ %	SPQ
last 5 digits of catalog number				
<b>C (<math>\mu</math>F)</b>	<b>pitch = <math>22.5 \pm 1.0</math> mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>			
0.0018	6.0 × 22.0 × 26.0	2.0	90653	750
0.002			90654	
0.0022	6.5 × 22.5 × 26.0	2.1	90655	700
0.0024	7.0 × 23.0 × 26.0	2.3	90656	600
0.0027			90657	
0.003	7.5 × 23.5 × 26.0	2.5	90658	550
0.0033	8.0 × 24.0 × 26.0	2.6	90659	500
0.0036			90661	
0.0039			90662	
0.0043	8.5 × 24.5 × 26.0	2.9	90663	450
0.0047			90664	
0.0051			90665	
0.0056			90666	
0.0062	9.0 × 25.0 × 26.0	3.1	90667	450
0.0068	9.5 × 25.5 × 26.0	3.5	90668	400
0.0075	10.0 × 26.0 × 26.0	3.6	90669	350
0.0082	10.5 × 26.5 × 26.0	4.0	90671	350

**SPECIFIC REFERENCE DATA (2000 VDC MONITOR)**

DESCRIPTION	VALUE	
	at 10 kHz	at 100 kHz
Tangent of loss angle:	$\leq 6 \times 10^{-4}$	$\leq 10 \times 10^{-4}$
Rated voltage pulse slope (dU/dt) <sub>R</sub> at 2000 V (DC)	10000 V/ $\mu$ s	
R between leads at 500 V; 1 minute	> 100000 M $\Omega$	
R between interconnected leads and case; 500 V; 1 minute	> 100000 M $\Omega$	
Ionization (AC) voltage (typical value) at 20 pC peak discharge	> 600 V	
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	3200 V; 1 minute	
Withstanding (DC) voltage between leads and case	2840 V; 1 minute	

**$U_{Rdc} = 2000$  V;  $U_{Rac} = 600$  V;  $U_{p-p} = 1700$  V (monitor standard)**

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING		
			LOOSE IN BOX		REEL
			$l_t = 5.0 \pm 1.0$ mm	all leads	SPQ
			C-tol = $\pm 5$ %	SPQ	
			last 5 digits of catalog number		SPQ
<b>C (<math>\mu</math>F)</b>	<b>pitch = <math>22.5 \pm 0.4</math> mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>				
0.001	6.0 × 19.0 × 26.0	2.1	74102	800	650
0.0011			74112		
0.0012	6.5 × 19.5 × 26.0	2.3	74122	750	600
0.0013			74132		
0.0015	7.0 × 20.0 × 26.0	2.6	74152	650	550
0.0016			74162		

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING		
			LOOSE IN BOX		REEL
			$l_t = 5.0 \pm 1.0$ mm	all leads	SPQ
			C-tol = $\pm 5$ %	SPQ	
			last 5 digits of catalog number	SPQ	SPQ
0.0018	7.5 × 20.5 × 26.0	2.8	74182	600	500
0.002	8.0 × 21.0 × 26.0	3.0	74202	550	500
0.0022	8.5 × 21.5 × 26.0	3.3	74222	500	450
0.0024	9.0 × 22.0 × 26.0	3.6	74242	450	450
0.0027	9.5 × 22.5 × 26.0	3.8	74272	450	400
0.003	10.0 × 23.0 × 26.0	4.2	74302	400	400
0.0033	10.5 × 23.5 × 26.0	4.5	74332	350	350
0.0036	11.0 × 24.0 × 26.0	4.9	74362	350	350
0.0039			74392		
0.0043			74432		
0.0047	11.5 × 24.5 × 26.0	5.3	74472	350	350
0.0051			74512		

$U_{Rdc} = 2000$  V;  $U_{Rac} = 600$  V;  $U_{p-p} = 1700$  V (monitor lock lead)

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING	
			LOOSE IN BOX	
			$l_t = 4.0 + 1.0/-0.5$ mm	
			C-tol = $\pm 5$ %	SPQ
last 5 digits of catalog number				
<b>C (μF)</b>	<b>pitch = 22.5 ± 0.4 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b>			
0.001	6.0 × 22.0 × 26.0	2.1	90672	750
0.0011			90673	
0.0012	6.5 × 22.5 × 26.0	2.3	90674	700
0.0013			90675	
0.0015	7.0 × 23.0 × 26.0	2.6	90676	600
0.0016			90677	
0.0018	7.5 × 23.5 × 26.0	2.8	90678	550
0.002	8.0 × 24.0 × 26.0	3.0	90679	500
0.0022	8.5 × 24.5 × 26.0	3.3	90681	450
0.0024	9.0 × 25.0 × 26.0	3.6	90682	450
0.0027	9.5 × 25.5 × 26.0	3.8	90683	400
0.003	10.0 × 26.0 × 26.0	4.2	90684	350
0.0033	10.5 × 26.5 × 26.0	4.5	90685	350
0.0036	11.0 × 27.0 × 26.0	4.9	90686	300
0.0039			90687	
0.0043			90688	
0.0047	11.5 × 27.5 × 26.0	5.3	90689	300
0.0051			90691	

**SPECIFIC REFERENCE DATA (2500 VDC MONITOR)**

DESCRIPTION	VALUE	
	at 10 kHz	at 100 kHz
Tangent of loss angle:	$\leq 6 \times 10^{-4}$	$\leq 10 \times 10^{-4}$
Rated voltage pulse slope (dU/dt) <sub>R</sub> at 2500 V (DC)	18000 V/μs	
R between leads at 500 V; 1 minute	> 100000 MΩ	
R between interconnected leads and case; 500 V; 1 minute	> 100000 MΩ	
Ionization (AC) voltage (typical value) at 20 pC peak discharge	> 600 V	
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	3500 V; 1 minute	
Withstanding (DC) voltage between leads and case	2840 V; 1 minute	



AC and Pulse Polypropylene  
Film Capacitors KP/MKP  
Radial Epoxy Lacquered Type

Vishay BCcomponents

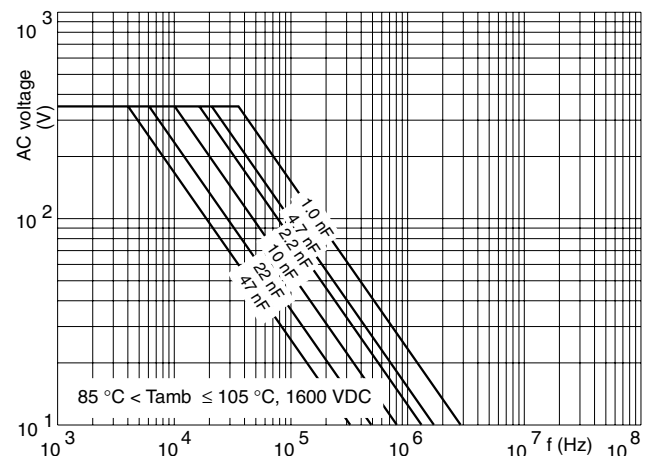
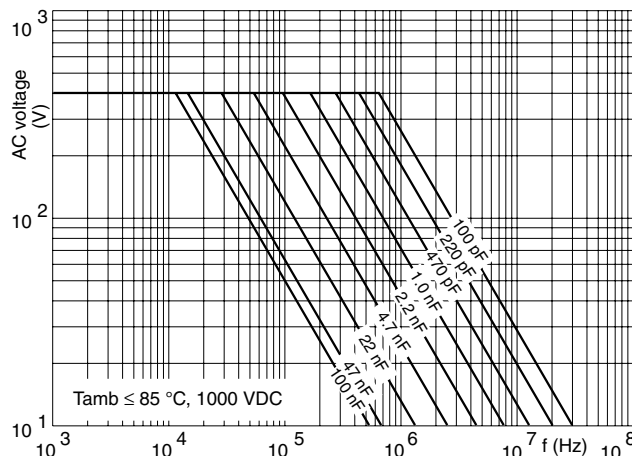
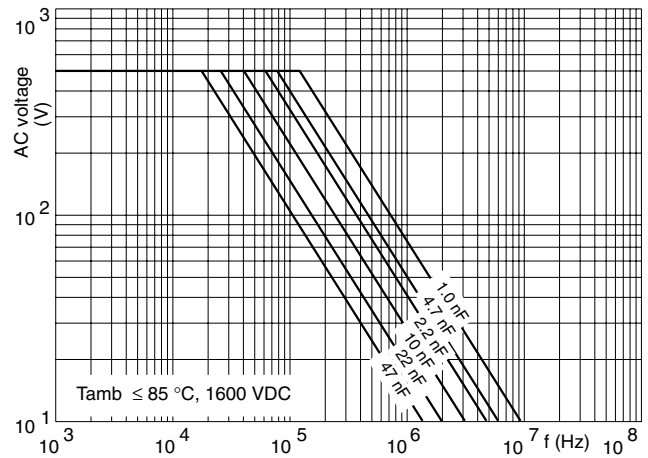
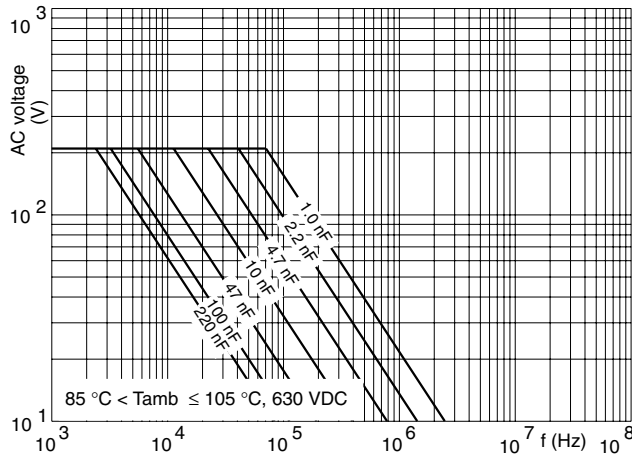
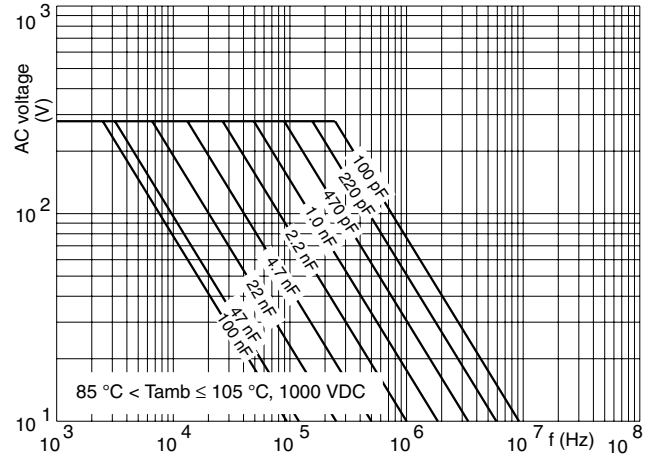
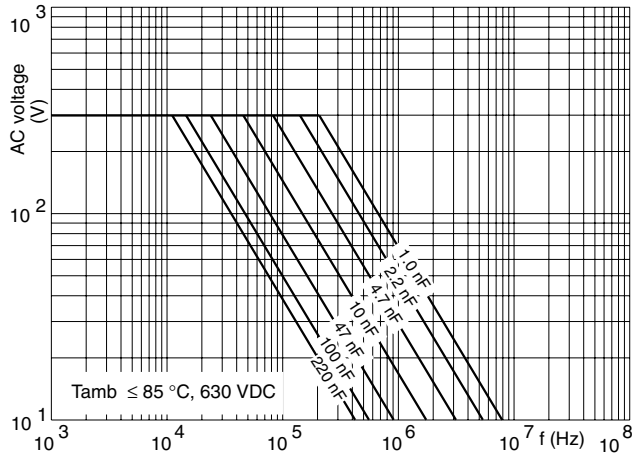
$U_{Rdc} = 2500\text{ V}$ ;  $U_{Rac} = 600\text{ V}$ ;  $U_{p-p} = 1700\text{ V}$  (monitor standard)

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING		
			LOOSE IN BOX		REEL
			$l_t = 5.0 \pm 1.0\text{ mm}$	all leads	
			C-tol = $\pm 5\%$	SPQ	SPQ
last 5 digits of catalog number					
<b>C (<math>\mu\text{F}</math>)</b>	<b>pitch = <math>22.5 \pm 0.4\text{ mm}</math>; <math>d_t = 0.80 \pm 0.08\text{ mm}</math></b>				
0.001	$6.0 \times 19.0 \times 26.0$	2.1	84102	800	650
0.0011			84112		
0.0012	$6.5 \times 19.5 \times 26.0$	2.3	84122	750	600
0.0013			84132		
0.0015	$7.0 \times 20.0 \times 26.0$	2.6	84152	650	550
0.0016			84162		
0.0018	$7.5 \times 20.5 \times 26.0$	2.8	84182	600	500
0.002	$8.0 \times 21.0 \times 26.0$	3.0	84202	550	500
0.0022	$8.5 \times 21.5 \times 26.0$	3.3	84222	500	450
0.0024	$9.0 \times 22.0 \times 26.0$	3.6	84242	450	450
0.0027	$9.5 \times 22.5 \times 26.0$	3.8	84272	450	400
0.003	$10.0 \times 23.0 \times 26.0$	4.2	84302	400	400
0.0033	$10.5 \times 23.5 \times 26.0$	4.5	84332	350	350
0.0036	$11.0 \times 24.0 \times 26.0$	4.9	84362	350	350
0.0039			84392		
0.0043			84432		
0.0047	$11.5 \times 24.5 \times 26.0$	5.3	84472	350	350
0.0051			84512		

$U_{Rdc} = 2500\text{ V}$ ;  $U_{Rac} = 600\text{ V}$ ;  $U_{p-p} = 1700\text{ V}$  (monitor lock lead)

	DIMENSIONS $w_{max} \times h (h')_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 375 ..... AND PACKAGING	
			LOOSE IN BOX	
			$l_t = 4.0 + 1.0/- 0.5\text{ mm}$	
			C-tol = $\pm 5\%$	SPQ
last 5 digits of catalog number				
<b>C (<math>\mu\text{F}</math>)</b>	<b>pitch = <math>22.5 \pm 0.4\text{ mm}</math>; <math>d_t = 0.80 \pm 0.08\text{ mm}</math></b>			
0.001	$6.0 \times 22.0 \times 26.0$	2.1	90692	750
0.0011			90693	
0.0012	$6.5 \times 22.5 \times 26.0$	2.3	90694	700
0.0013			90695	
0.0015	$7.0 \times 23.0 \times 26.0$	2.6	90696	600
0.0016			90697	
0.0018	$7.5 \times 23.5 \times 26.0$	2.8	90698	550
0.002	$8.0 \times 24.0 \times 26.0$	3.0	90699	500
0.0022	$8.5 \times 24.5 \times 26.0$	3.3	90701	450
0.0024	$9.0 \times 25.0 \times 26.0$	3.6	90702	450
0.0027	$9.5 \times 25.5 \times 26.0$	3.8	90703	400
0.003	$10.0 \times 26.0 \times 26.0$	4.2	90704	350
0.0033	$10.5 \times 26.5 \times 26.0$	4.5	90705	350
0.0036	$11.0 \times 27.0 \times 26.0$	4.9	90706	300
0.0039			90707	
0.0043			90708	
0.0047	$11.5 \times 27.5 \times 26.0$	5.3	90709	300
0.0051			90711	

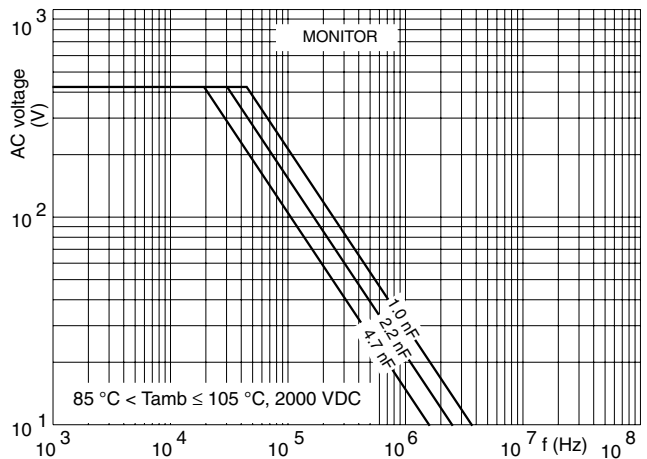
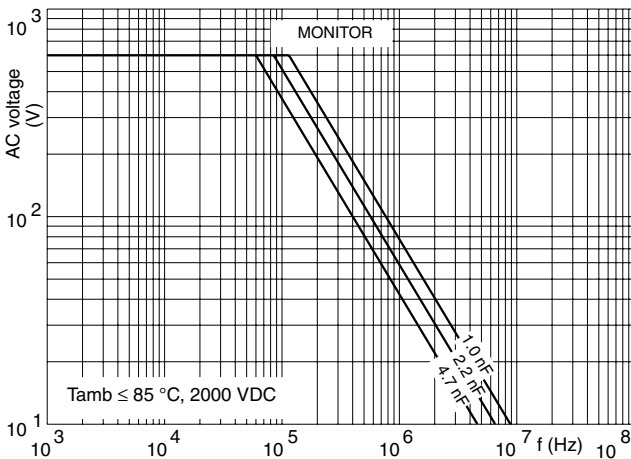
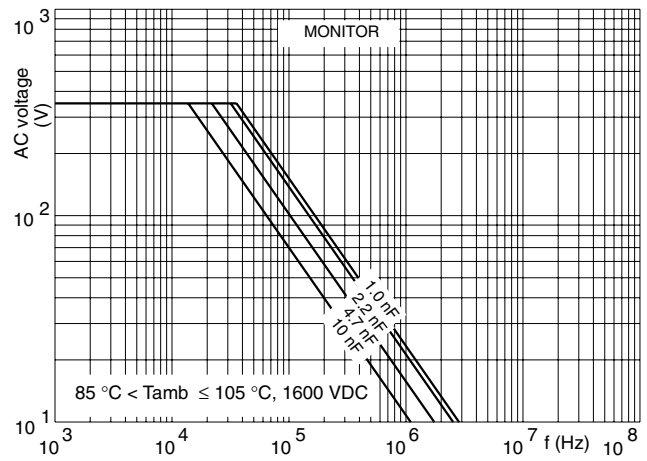
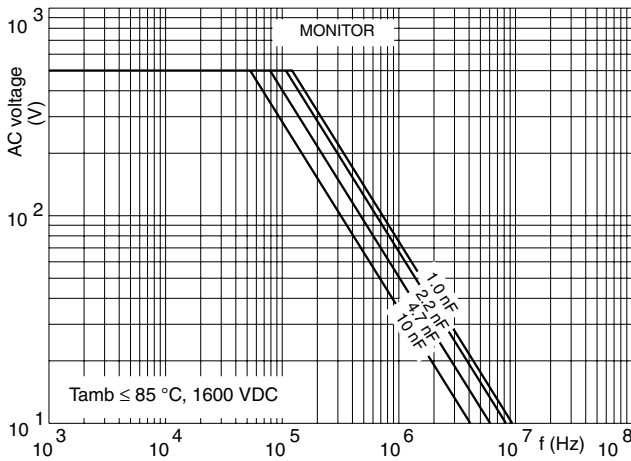
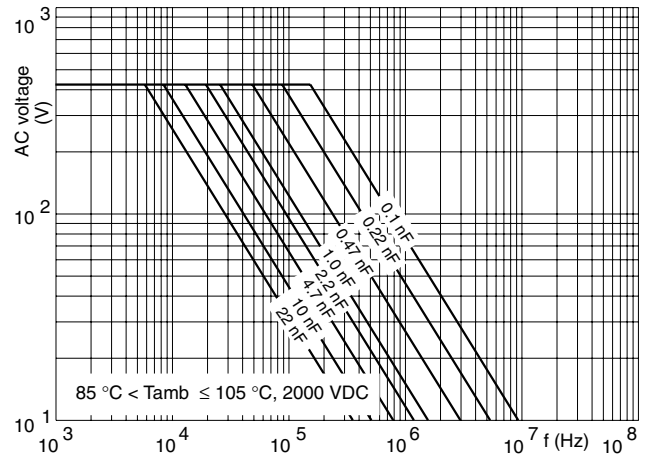
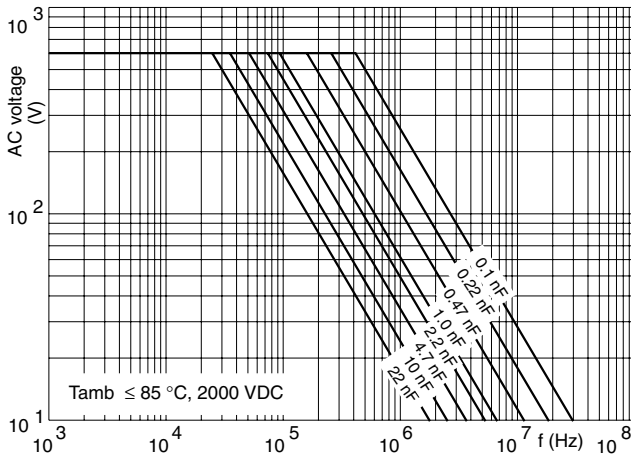
**MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY**

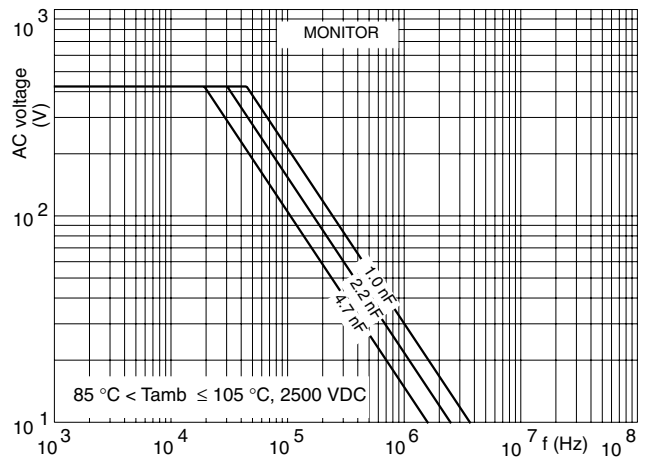
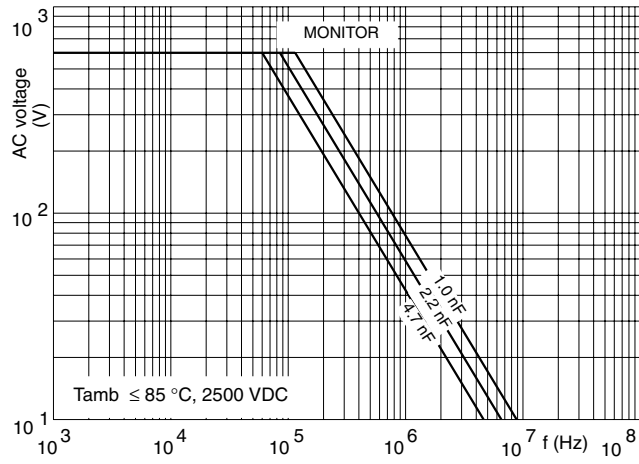




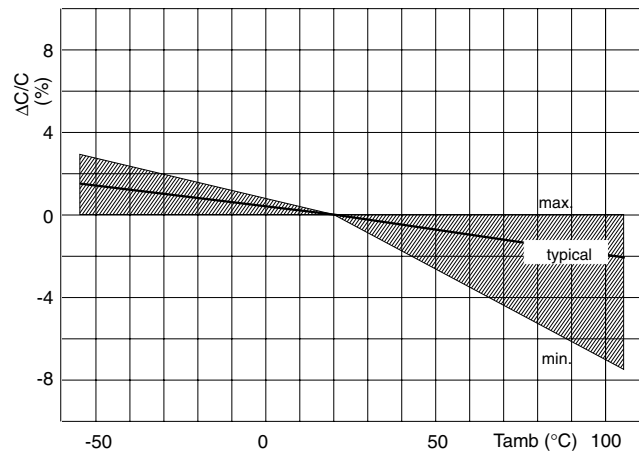
AC and Pulse Polypropylene  
Film Capacitors KP/MKP  
Radial Epoxy Lacquered Type

Vishay BCcomponents

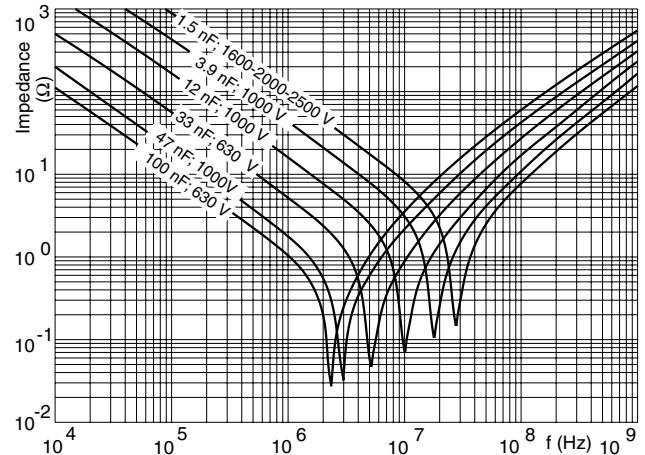




**CAPACITANCE**



**IMPEDANCE**





## Notice

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.