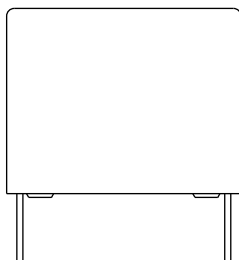




AC and Pulse Metallized Polypropylene Film Capacitors MKP Radial Potted Type



FEATURES

- Low loss dielectric
- Material categorization:
for definitions of compliance please see
www.vishay.com/doc?99912

APPLICATIONS

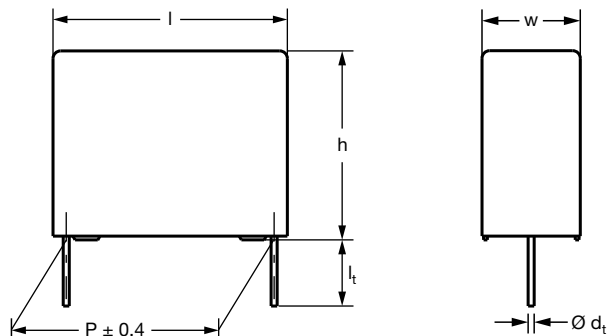
Low losses due to low contact resistance and low loss dielectric make these products suitable for applications where high currents at high frequency occur or high stability is preferred. Their small dimensions make them ideal for circuits with high packaging density.



QUICK REFERENCE DATA	
Capacitance range (E24 series)	0.01 μ F to 6.2 μ F
Capacitance tolerance	$\pm 5\%$
Climatic category	55/085/56
Maximum application temperature	85 °C
Reference specifications	IEC 60384-17
Dielectric	Polypropylene film
Electrodes	Metallized film
Construction	Wound mono construction
Encapsulation	Flame retardant plastic case and epoxy resin (UL-class 94 V-0)
Leads	Tinned wire
Marking	C-value; tolerance; rated voltage; manufacturer's type designation; code for dielectric material; manufacturer's emblem; code for factory of origin; year and week of manufacture
Rated DC voltage	160 V _{DC} ; 250 V _{DC} ; 400 V _{DC} ; 630 V _{DC}
Rated AC voltage	100 V _{AC} ; 160 V _{AC} ; 200 V _{AC} ; 220 V _{AC}
Rated peak-to-peak voltage	280 V; 450 V; 560 V; 620 V
Rated temperature	85 °C
Performance grade	Grade 1 (long life)
Stability grade	160 V versions: grade 2 250 V to 630 V versions; pitch 5 mm to 15 mm: grade 2 250 V to 630 V versions; pitch 22.5 mm and 27.5 mm: grade 1

Note

- For more detailed data and test requirements contact dc-film@vishay.com

**DIMENSIONS** in millimeters**COMPOSITION OF CATALOG NUMBER**

TYPE AND PITCHES	
379	10.0 mm
	15.0 mm
	22.5 mm
	27.5 mm

CAPACITANCE
(numerically)

MULTIPLIER (nF)	
1	3
10	4
100	5

Example:

$$104 = 10 \times 10 = 100 \text{ nF}$$

2222*	379	XX	XX	X
BFC2	379	XX	XX	X

* Old ordering code

TYPE	PACKAGING	LEAD CONFIGURATION	PREFERRED TYPES				
			C-TOL.	160 V	250 V	400 V	630 V
379	Loose in box	Lead length 4.0 mm + 1 mm / - 0.5 mm or 3.5 mm ± 0.3 mm	± 5 %	34	44	54	64
TYPE	PACKAGING	LEAD CONFIGURATION	ON REQUEST				
379	Taped on reel	H = 18.5 mm; P ₀ = 12.7 mm; reel diameter 500 mm	± 5 %	35	45	55	65



SPECIFIC REFERENCE DATA - 160 V _{DC}		
DESCRIPTION	VALUE	
Tangent of loss angle:	at 10 kHz	at 100 kHz
$C \leq 0.075 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 20 \times 10^{-4}$
$0.075 \mu\text{F} < C \leq 0.11 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 25 \times 10^{-4}$
$0.11 \mu\text{F} < C \leq 0.16 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 30 \times 10^{-4}$
$0.16 \mu\text{F} < C \leq 0.22 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 40 \times 10^{-4}$
$0.22 \mu\text{F} < C \leq 0.30 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 45 \times 10^{-4}$
$0.30 \mu\text{F} < C \leq 0.39 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 45 \times 10^{-4}$
$0.39 \mu\text{F} < C \leq 0.56 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 80 \times 10^{-4}$
$0.56 \mu\text{F} < C \leq 0.68 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 80 \times 10^{-4}$
$0.68 \mu\text{F} < C \leq 0.82 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 90 \times 10^{-4}$
$0.82 \mu\text{F} < C \leq 0.91 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 90 \times 10^{-4}$
$0.91 \mu\text{F} < C \leq 1.0 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 120 \times 10^{-4}$
$1.0 \mu\text{F} < C \leq 1.2 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 125 \times 10^{-4}$
$1.2 \mu\text{F} < C \leq 1.3 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 135 \times 10^{-4}$
$1.3 \mu\text{F} < C \leq 1.5 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 135 \times 10^{-4}$
$1.5 \mu\text{F} < C \leq 1.6 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 135 \times 10^{-4}$
$1.6 \mu\text{F} < C \leq 1.8 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 145 \times 10^{-4}$
$1.8 \mu\text{F} < C \leq 2.0 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 145 \times 10^{-4}$
$2.0 \mu\text{F} < C \leq 2.2 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 145 \times 10^{-4}$
$2.2 \mu\text{F} < C \leq 2.4 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 155 \times 10^{-4}$
$2.4 \mu\text{F} < C \leq 2.7 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 155 \times 10^{-4}$
$2.7 \mu\text{F} < C \leq 3.0 \mu\text{F}$	$\leq 20 \times 10^{-4}$	$\leq 160 \times 10^{-4}$
$3.0 \mu\text{F} < C \leq 3.3 \mu\text{F}$	$\leq 20 \times 10^{-4}$	$\leq 160 \times 10^{-4}$
$3.3 \mu\text{F} < C \leq 3.6 \mu\text{F}$	$\leq 20 \times 10^{-4}$	$\leq 160 \times 10^{-4}$
$3.6 \mu\text{F} < C \leq 3.9 \mu\text{F}$	$\leq 20 \times 10^{-4}$	$\leq 165 \times 10^{-4}$
$3.9 \mu\text{F} < C \leq 4.3 \mu\text{F}$	$\leq 20 \times 10^{-4}$	$\leq 165 \times 10^{-4}$
$4.3 \mu\text{F} < C \leq 4.7 \mu\text{F}$	$\leq 20 \times 10^{-4}$	$\leq 165 \times 10^{-4}$
$4.7 \mu\text{F} < C \leq 5.1 \mu\text{F}$	$\leq 20 \times 10^{-4}$	$\leq 175 \times 10^{-4}$
$5.1 \mu\text{F} < C \leq 5.6 \mu\text{F}$	$\leq 20 \times 10^{-4}$	$\leq 175 \times 10^{-4}$
$5.6 \mu\text{F} < C \leq 6.2 \mu\text{F}$	$\leq 40 \times 10^{-4}$	$\leq 195 \times 10^{-4}$
Rated voltage pulse slope (dU/dt) _R :		
$l = 12.5 \text{ mm}$	60 V/ μs	
$l = 17.5 \text{ mm}$	50 V/ μs	
$l = 26.0 \text{ mm}$	25 V/ μs	
$l = 31.0 \text{ mm}$	15 V/ μs (b < 15 mm)	
$l = 31.0 \text{ mm}$	7.5 V/ μs (b $\geq$ 15 mm)	
R between leads for $C \leq 1.0 \mu\text{F}$ at 100 V; 1 min	> 100 000 M Ω	
RC between leads, for $C > 1 \mu\text{F}$ at 100 V; 1 min	> 100 000 s	
R between interconnected leads and case; 100 V; 1 min	> 100 000 M Ω	
Withstanding (DC) voltage (cut off current 10 mA) ⁽¹⁾ ; rise time $\leq$ 1000 V/s	256 V; 1 min	
Withstanding (DC) voltage between leads and case	2840 V; 1 min	

Note

⁽¹⁾ See "Voltage Proof Test for Metalized Film Capacitors": www.vishay.com/doc?28169



ELECTRICAL DATA AND ORDERING CODE									
U _{RDC} (V)	CAP. (μF)	DIMENSIONS w x h x l (mm)	MASS ⁽³⁾ (g)	CATALOG NUMBER BFC2 379 AND PACKAGING					
				LOOSE IN BOX		REEL ⁽²⁾			
				l _t = 4.0 mm + 1.0 mm/- 0.5 mm ⁽¹⁾		H = 18.5 mm, P ₀ = 12.7 mm			
				C-TOL. = ± 5 %	SPQ	SPQ			
				LAST 5 DIGITS OF CATALOG NUMBER					
160	PITCH = 10.0 mm ± 0.4 mm; d _t = 0.60 mm ± 0.06 mm; U _{RAC} = 100 V; U _{p-p} = 280 V								
	0.075 0.082 0.091 0.10	4.0 x 10.0 x 12.5	0.60	34753 34823 34913 34104	1000	1400			
	0.11 0.12 0.13			34114 34124 34134		1100			
	0.15 0.16			5.0 x 11.0 x 12.5		0.82	34154 34164	1000	1100 900
	PITCH = 15.0 mm ± 0.4 mm; d _t = 0.60 mm ± 0.06 mm; U _{RAC} = 100 V; U _{p-p} = 280 V								
	0.18 0.20 0.22 0.24 0.27	5.0 x 11.0 x 17.5	1.0	34184 34204 34224 34244 34274	1000	1100			
	0.30			34304		900			
	0.33 0.36 0.39	6.0 x 12.0 x 17.5	1.4	34334 34364 34394	1000	900			
	0.43 0.47			34434 34474		800			
	PITCH = 15.0 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 100 V; U _{p-p} = 280 V								
	0.51 0.56 0.62	7.0 x 13.5 x 17.5	1.8	34514 34564 34624	1000	800 650			
	0.68 0.75			8.5 x 15.0 x 17.5		2.4	34684 34754	1000	650
	PITCH = 22.5 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 100 V; U _{p-p} = 280 V								
	0.82 0.91	6.0 x 15.5 x 26.0	2.4	34824 34914	200	550			
	1.0 1.1 1.2	7.0 x 16.5 x 26.0	2.9	34105 34115 34125	200	450			
	1.3	8.5 x 18.0 x 26.0	3.8	34135	200	450			
	1.5 1.6 1.8			34155 34165 34185		350			
	PITCH = 27.5 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 100 V; U _{p-p} = 280 V								
	2.0 2.2			9.0 x 19.0 x 31.5		5.5	34205 34225	100	
	2.4 2.7 3.0 3.3	11.0 x 21.0 x 31.0	7.4	34245 34275 34305 34335					
	3.6 3.9 4.3	13.0 x 23.0 x 31.0	9.2	34365 34395 34435	100				
	4.7 5.1 5.6	15.0 x 25.0 x 31.5	12.3	34475 34515 34565	100				
	6.2	18.0 x 28.0 x 31.5	16.1	34625	100				

Notes

- SPQ = Standard Packing Quantity

⁽¹⁾ l_t = 4.0 mm + 1 mm / - 0.5 mm for pitch = 10 mm and 3.5 mm ± 0.3 mm for pitch = 15 mm; 22.5 mm and 27.5 mm.

⁽²⁾ H = in-tape height; P₀ = sprocket hole distance; for detailed specifications refer to packaging information: www.vishay.com/doc?28139

⁽³⁾ Weight for short lead product only



SPECIFIC REFERENCE DATA - 250 V _{DC}		
DESCRIPTION	VALUE	
Tangent of loss angle:	at 10 kHz	at 100 kHz
0.047 $\mu\text{F} < C \leq 0.075 \mu\text{F}$	$\leq 5 \times 10^{-4}$	$\leq 20 \times 10^{-4}$
0.075 $\mu\text{F} < C \leq 0.011 \mu\text{F}$	$\leq 5 \times 10^{-4}$	$\leq 25 \times 10^{-4}$
0.11 $\mu\text{F} < C \leq 0.18 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 30 \times 10^{-4}$
0.18 $\mu\text{F} < C \leq 0.3 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 40 \times 10^{-4}$
0.30 $\mu\text{F} < C \leq 0.39 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 45 \times 10^{-4}$
0.39 $\mu\text{F} < C \leq 0.56 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 80 \times 10^{-4}$
0.56 $\mu\text{F} < C \leq 0.68 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 80 \times 10^{-4}$
0.68 $\mu\text{F} < C \leq 0.82 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 80 \times 10^{-4}$
0.82 $\mu\text{F} < C \leq 0.91 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 90 \times 10^{-4}$
0.91 $\mu\text{F} < C \leq 1.0 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 90 \times 10^{-4}$
1.0 $\mu\text{F} < C \leq 1.2 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 120 \times 10^{-4}$
1.2 $\mu\text{F} < C \leq 1.3 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 125 \times 10^{-4}$
1.3 $\mu\text{F} < C \leq 1.5 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 135 \times 10^{-4}$
1.5 $\mu\text{F} < C \leq 1.6 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 135 \times 10^{-4}$
1.6 $\mu\text{F} < C \leq 1.8 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 135 \times 10^{-4}$
1.8 $\mu\text{F} < C \leq 2.0 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 145 \times 10^{-4}$
2.0 $\mu\text{F} < C \leq 2.2 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 145 \times 10^{-4}$
2.2 $\mu\text{F} < C \leq 2.4 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 145 \times 10^{-4}$
2.4 $\mu\text{F} < C \leq 2.7 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 155 \times 10^{-4}$
2.7 $\mu\text{F} < C \leq 3.0 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 155 \times 10^{-4}$
3.0 $\mu\text{F} < C \leq 3.3 \mu\text{F}$	$\leq 20 \times 10^{-4}$	$\leq 160 \times 10^{-4}$
3.3 $\mu\text{F} < C \leq 3.6 \mu\text{F}$	$\leq 20 \times 10^{-4}$	$\leq 160 \times 10^{-4}$
3.6 $\mu\text{F} < C \leq 3.9 \mu\text{F}$	$\leq 20 \times 10^{-4}$	$\leq 160 \times 10^{-4}$
Rated voltage pulse slope (dU/dt) _R :		
l = 12.5 mm	70 V/ μs	
l = 17.5 mm	60 V/ μs	
l = 26.0 mm	30 V/ μs	
l = 31.0 mm	20 V/ μs (b < 15 mm)	
l = 31.0 mm	10 V/ μs (b $\geq$ 15 mm)	
R between leads for C $\leq$ 1.0 μF at 100 V; 1 min	> 100 000 M Ω	
RC between leads, for C > 1 μF at 100 V; 1 min	> 100 000 s	
R between interconnected leads and case; 100 V; 1 min	> 100 000 M Ω	
Withstanding (DC) voltage (cut off current 10 mA) ⁽¹⁾ ; rise time 1000 V/s	400 V; 1 min	
Withstanding (DC) voltage between leads and case	2840 V; 1 min	

Note

⁽¹⁾ See "Voltage Proof Test for Metalized Film Capacitors": www.vishay.com/doc?28169



ELECTRICAL DATA AND ORDERING CODE															
U _{RDC} (V)	CAP. (μF)	DIMENSIONS w x h x l (mm)	MASS ⁽³⁾ (g)	CATALOG NUMBER BFC2 379 AND PACKAGING											
				LOOSE IN BOX		REEL ⁽²⁾									
				l _t = 4.0 mm + 1.0 mm/- 0.5 mm ⁽¹⁾		H = 18.5 mm, P ₀ = 12.7 mm									
				C-TOL. = ± 5 %	SPQ	SPQ									
				LAST 5 DIGITS OF CATALOG NUMBER											
250	PITCH = 10.0 mm ± 0.4 mm; d _t = 0.60 mm ± 0.06 mm; U _{RAC} = 160 V; U _{p-p} = 450 V														
	0.047 0.051 0.056 0.062 0.068	4.0 x 10.0 x 12.5	0.60	44473 44513 44563 44623 44683	1000	1400									
	0.075 0.082 0.091			44753 44823 44913		1100									
	PITCH = 15.0 mm ± 0.4 mm; d _t = 0.60 mm ± 0.06 mm; U _{RAC} = 160 V; U _{p-p} = 450 V														
	0.10 0.11 0.12 0.13 0.15 0.16			5.0 x 11.0 x 17.5		1.0	44104 44114 44124 44134 44154 44164	1000	1100						
	0.18 0.20 0.22 0.24						44184 44204 44224 44244		900						
	0.27 0.30 0.33 0.36	6.0 x 12.0 x 17.5	1.4		44274 44304 44334 44364		1000		800 650						
	PITCH = 15.0 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 160 V; U _{p-p} = 450 V														
	0.39 0.43 0.47				7.0 x 13.5 x 17.5				1.8	44394 44434 44474	1000	650			
	PITCH = 22.5 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 160 V; U _{p-p} = 450 V														
	0.51 0.56 0.62 0.68			6.0 x 15.5 x 26.0		2.4		44514 44564 44624 44684		200		550 450			
	0.75 0.82 0.91 1.0	7.0 x 16.5 x 26.0	2.9				44754 44824 44914 44105	200				450 350			
	1.1 1.2						8.5 x 18.0 x 26.0					3.8	44115 44125	200	350
	PITCH = 27.5 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 160 V; U _{p-p} = 450 V														
	1.3 1.5 1.6 1.8				9.0 x 19.0 x 31.5				5.5		44135 44155 44165 44185		100		
	2.0 2.2 2.4 2.7			11.0 x 21.0 x 31.0		7.4				44205 44225 44245 44275	100				
	3.0 3.3 3.6	13.0 x 23.0 x 31.0	9.2					44305 44335 44365		100					
	3.9						15.0 x 25.0 x 31.5	12.3				44395		100	

Notes

- SPQ = Standard Packing Quantity

(1) l_t = 4.0 mm + 1 mm / - 0.5 mm for pitch = 10 mm and 3.5 mm ± 0.3 mm for pitch = 15 mm; 22.5 mm and 27.5 mm.

(2) H = in-tape height; P₀ = sprocket hole distance; for detailed specifications refer to packaging information: www.vishay.com/doc?28139

(3) Weight for short lead product only



SPECIFIC REFERENCE DATA - 400 V _{DC}		
DESCRIPTION	VALUE	
Tangent of loss angle:	at 10 kHz	at 100 kHz
0.022 $\mu\text{F} < C \leq 0.027 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 15 \times 10^{-4}$
0.027 $\mu\text{F} < C \leq 0.075 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 20 \times 10^{-4}$
0.075 $\mu\text{F} < C \leq 0.11 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 25 \times 10^{-4}$
0.11 $\mu\text{F} < C \leq 0.18 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 30 \times 10^{-4}$
0.18 $\mu\text{F} < C \leq 0.3 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 40 \times 10^{-4}$
0.30 $\mu\text{F} < C \leq 0.39 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 45 \times 10^{-4}$
0.39 $\mu\text{F} < C \leq 0.56 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 80 \times 10^{-4}$
0.56 $\mu\text{F} < C \leq 0.68 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 80 \times 10^{-4}$
0.68 $\mu\text{F} < C \leq 0.82 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 80 \times 10^{-4}$
0.82 $\mu\text{F} < C \leq 0.91 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 90 \times 10^{-4}$
0.91 $\mu\text{F} < C \leq 1.0 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 90 \times 10^{-4}$
1.0 $\mu\text{F} < C \leq 1.2 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 120 \times 10^{-4}$
1.2 $\mu\text{F} < C \leq 1.3 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 125 \times 10^{-4}$
1.3 $\mu\text{F} < C \leq 1.5 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 135 \times 10^{-4}$
1.5 $\mu\text{F} < C \leq 1.6 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 135 \times 10^{-4}$
1.6 $\mu\text{F} < C \leq 1.8 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 135 \times 10^{-4}$
1.8 $\mu\text{F} < C \leq 2.0 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 145 \times 10^{-4}$
Rated voltage pulse slope (dU/dt) _R :		
l = 12.5 mm	80 V/ μs	
l = 17.5 mm	70 V/ μs	
l = 26.0 mm	35 V/ μs	
l = 31.0 mm	25 V/ μs (b < 15 mm)	
l = 31.0 mm	13 V/ μs (b $\geq$ 15 mm)	
R between leads for $C \leq 1.0 \mu\text{F}$ at 100 V; 1 min	> 100 000 M Ω	
RC between leads, for $C > 1 \mu\text{F}$ at 100 V; 1 min	> 100 000 s	
R between interconnected leads and case; 100 V; 1 min	> 100 000 M Ω	
Withstanding (DC) voltage (cut off current 10 mA) ⁽¹⁾ ; rise time 1000 V/s	640 V; 1 min	
Withstanding (DC) voltage between leads and case	2840 V; 1 min	

Note

⁽¹⁾ See "Voltage Proof Test for Metalized Film Capacitors": www.vishay.com/doc?28169



ELECTRICAL DATA AND ORDERING CODE									
U _{RDC} (V)	CAP. (μF)	DIMENSIONS w x h x l (mm)	MASS ⁽³⁾ (g)	CATALOG NUMBER BFC2 379 AND PACKAGING					
				LOOSE IN BOX		REEL ⁽²⁾			
				l _t = 4.0 mm + 1.0 mm/- 0.5 mm ⁽¹⁾		H = 18.5 mm, P ₀ = 12.7 mm			
				C-TOL. = ± 5 %	SPQ	SPQ			
				LAST 5 DIGITS OF CATALOG NUMBER					
400	PITCH = 10.0 mm ± 0.4 mm; d _t = 0.60 mm ± 0.06 mm; U _{RAC} = 200 V; U _{p-p} = 560 V								
	0.022 0.024 0.027 0.030 0.033	4.0 x 10.0 x 12.5	0.60	54223 54243 54273 54303 54333	1000	1400			
	0.036 0.039 0.043			54363 54393 54433		1100			
	PITCH = 15.0 mm ± 0.4 mm; d _t = 0.60 mm ± 0.06 mm; U _{RAC} = 200 V; U _{p-p} = 560 V								
	0.047 0.051 0.056 0.062 0.068 0.075 0.082			5.0 x 11.0 x 17.5		1.0	54473 54513 54563 54623 54683 54753 54823	1000	1100
	0.091 0.10 0.11 0.12						54913 54104 54114 54124		900
	0.13 0.15 0.16 0.18	6.0 x 12.0 x 17.5	1.4		54134 54154 54164 54184		1000		800 650
	PITCH = 15.0 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 200 V; U _{p-p} = 560 V								
	0.20 0.22	7.0 x 13.5 x 17.5	1.8		54204 54224		1000		650
	PITCH = 22.5 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 200 V; U _{p-p} = 560 V								
	0.24 0.27 0.30 0.33	6.0 x 15.5 x 26.0	2.4	54244 54274 54304	200	550 450			
	0.36 0.39 0.43 0.47			54334					
	0.36 0.39 0.43 0.47	7.0 x 16.5 x 26.0	2.9	54364 54394 54434 54474	200	450			
	0.51 0.56 0.62	8.5 x 18.0 x 26.0	3.8	54514 54564 54624	200	350			
	PITCH = 27.5 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 200 V; U _{p-p} = 560 V								
	0.68 0.75 0.82	9.0 x 19.0 x 31.5	5.5	54684 54754 54824	100				
	0.91 1.0 1.1 1.2 1.3	11.0 x 21.0 x 31.0	7.4	54914 54105 54115 54125 54135	100				
	1.5 1.6 1.8			54155 54165 54185			100		
	2.0			54205				100	

Notes

- SPQ = Standard Packing Quantity

(1) l_t = 4.0 mm + 1 mm / - 0.5 mm for pitch = 10 mm and 3.5 mm ± 0.3 mm for pitch = 15 mm; 22.5 mm and 27.5 mm.

(2) H = in-tape height; P₀ = sprocket hole distance; for detailed specifications refer to packaging information: www.vishay.com/doc?28139

(3) Weight for short lead product only



SPECIFIC REFERENCE DATA - 630 V_{DC}		
DESCRIPTION	VALUE	
Tangent of loss angle:	at 10 kHz	at 100 kHz
0.010 $\mu\text{F} < C \leq 0.027 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 15 \times 10^{-4}$
0.027 $\mu\text{F} < C \leq 0.075 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 20 \times 10^{-4}$
0.075 $\mu\text{F} < C \leq 0.11 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 25 \times 10^{-4}$
0.11 $\mu\text{F} < C \leq 0.18 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 30 \times 10^{-4}$
0.18 $\mu\text{F} < C \leq 0.30 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 40 \times 10^{-4}$
0.30 $\mu\text{F} < C \leq 0.39 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 40 \times 10^{-4}$
0.39 $\mu\text{F} < C \leq 0.56 \mu\text{F}$	$\leq 10 \times 10^{-4}$	$\leq 45 \times 10^{-4}$
0.56 $\mu\text{F} < C \leq 0.68 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 80 \times 10^{-4}$
0.68 $\mu\text{F} < C \leq 0.82 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 80 \times 10^{-4}$
0.82 $\mu\text{F} < C \leq 1.0 \mu\text{F}$	$\leq 15 \times 10^{-4}$	$\leq 90 \times 10^{-4}$
Rated voltage pulse slope (dU/dt) _R :		
l = 12.5 mm	100 V/ μs	
l = 17.5 mm	90 V/ μs	
l = 26.0 mm	45 V/ μs	
l = 31.0 mm	30 V/ μs (b < 15 mm)	
l = 31.0 mm	15 V/ μs (b $\geq$ 15 mm)	
R between leads for $C \leq 1.0 \mu\text{F}$ at 500 V; 1 min	> 100 000 M Ω	
RC between leads, for $C > 1 \mu\text{F}$ at 100 V; 1 min	> 100 000 s	
R between interconnected leads and case; 500 V; 1 min	> 100 000 M Ω	
Withstanding (DC) voltage (cut off current 10 mA) ⁽¹⁾ ; rise time 1000 V/s	960 V; 1 min	
Withstanding (DC) voltage between leads and case	2840 V; 1 min	

Note

⁽¹⁾ See "Voltage Proof Test for Metalized Film Capacitors": www.vishay.com/doc?28169



ELECTRICAL DATA AND ORDERING CODE												
U _{RDC} (V)	CAP. (μF)	DIMENSIONS w x h x l (mm)	MASS ⁽³⁾ (g)	CATALOG NUMBER BFC2 379 AND PACKAGING								
				LOOSE IN BOX		REEL ⁽²⁾						
				l _t = 4.0 mm + 1.0 mm/- 0.5 mm ⁽¹⁾		H = 18.5 mm, P ₀ = 12.7 mm						
				C-TOL. = ± 5 %	SPQ	SPQ						
				LAST 5 DIGITS OF CATALOG NUMBER								
630	PITCH = 10.0 mm ± 0.4 mm; d _t = 0.60 mm ± 0.06 mm; U _{RAC} = 220 V; U _{p-p} = 620 V											
	0.010 0.011 0.012 0.013 0.015 0.016	4.0 x 10.0 x 12.5	0.60	64103 64113 64123 64133 64153 64163	1000	1400						
	0.018 0.020 0.022 0.024			64183 64203 64223 64243		1100						
	PITCH = 15.0 mm ± 0.4 mm; d _t = 0.60 mm ± 0.06 mm; U _{RAC} = 220 V; U _{p-p} = 620 V											
	0.027 0.030 0.033 0.036 0.039			5.0 x 11.0 x 17.5		1.0	64273 64303 64333 64363 64393	1000	1100			
	0.043 0.047 0.051 0.056 0.062						64433 64473 64513 64563 64623		900			
	0.068						64683		800			
	0.075 0.082 0.091 0.10	6.0 x 12.0 x 17.5	1.4		64753 64823 64913 64104		1000		800 650			
	PITCH = 15.0 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 220 V; U _{p-p} = 620 V											
	0.11				7.0 x 13.5 x 17.5				1.8	64114	1000	650
	PITCH = 22.5 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 220 V; U _{p-p} = 620 V											
	0.12 0.13 0.15 0.16 0.18	6.0 x 15.5 x 26.0	2.4	64124 64134 64154 64164 64184	200	550 450						
	0.20 0.22 0.24			7.0 x 16.5 x 26.0		2.9	64204 64224 64244	450 350				
	0.27 0.30						8.5 x 18.0 x 26.0	3.8	64274 64304	350		
	PITCH = 27.5 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 220 V; U _{p-p} = 620 V											
	0.33 0.36 0.39 0.43 0.47 0.51	9.0 x 19.0 x 31.5	5.5	64334 64364 64394 64434 64474 64514	100							
	0.56 0.62 0.68 0.75			11.0 x 21.0 x 31.0			7.4	64564 64624 64684 64754	100			
	0.82 0.91 1.0							13.0 x 23.0 31.0		9.2	64824 64914 64105	100

Notes

- SPQ = Standard Packing Quantity

- U_{RAC} = 250 V/U_{p-p} = 700 V for C > 0.11 μF.

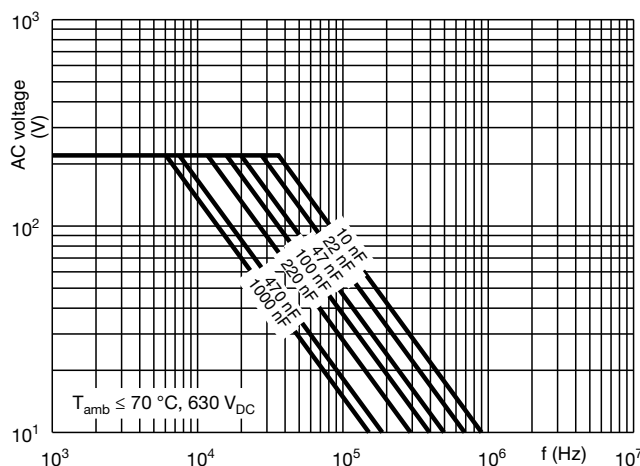
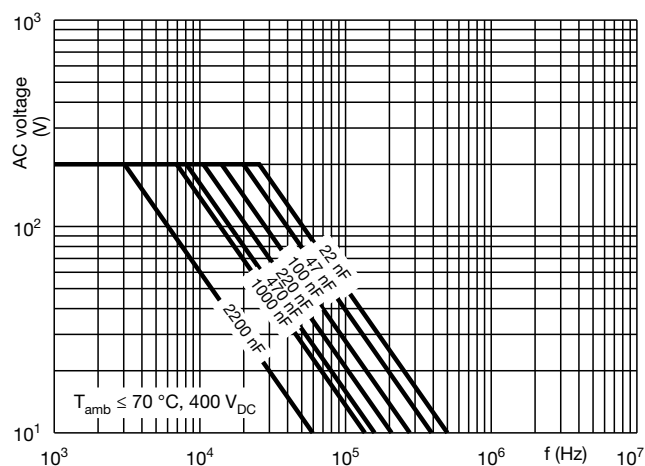
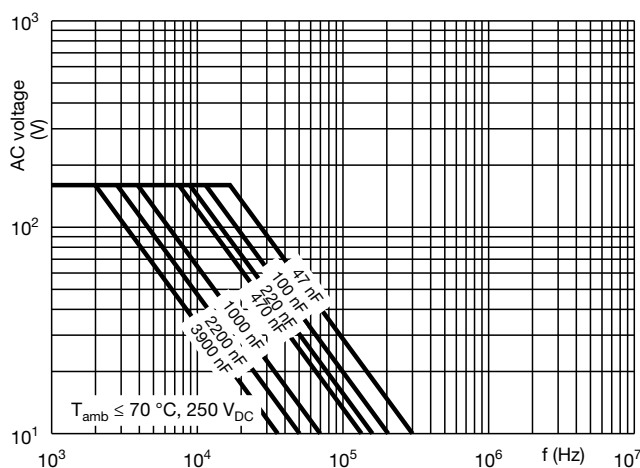
⁽¹⁾ l_t = 4.0 mm + 1 mm / - 0.5 mm for pitch = 10 mm and 3.5 mm ± 0.3 mm for pitch = 15 mm; 22.5 mm and 27.5 mm.

⁽²⁾ H = in-tape height; P₀ = sprocket hole distance; for detailed specifications refer to packaging information: www.vishay.com/doc?28139

⁽³⁾ Weight for short lead product only

Figure 1 is a line graph showing the variation of the ratio C/C_0 (%) on the y-axis versus ambient temperature T_{amb} (°C) on the x-axis. The y-axis ranges from -2 to 2 with major grid lines every 1 unit and minor grid lines every 0.2 units. The x-axis ranges from -50 to 80 with major grid lines every 20 units and minor grid lines every 10 units. A single data series is plotted as a solid black line, labeled '1 kHz'. The line shows a linear decrease in the ratio as temperature increases. Key data points include approximately (-50, 1.5), (0, 0.5), (20, -0.5), (40, -1.2), and (80, -1.8).

T_{amb} (°C)	C/C_0 (%)
-50	1.5
-30	1.0
-10	0.5
10	0.0
30	-0.5
50	-1.0
70	-1.5
80	-1.8





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