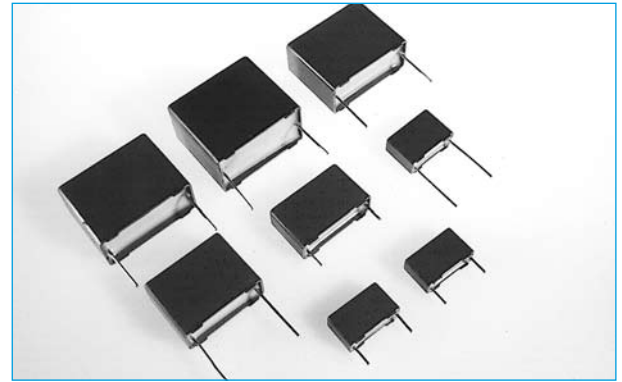


## CAPACITORS

- Metallised Polypropylene
- 7.5mm - 37.5mm pitch
- Plastic case UL94V-0
- Epoxy resin sealed
- High pulse strength
- Small dimensions
- High contact reliability

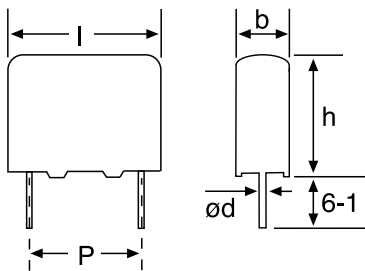
## BOX POLYPROPYLENE LBPP



## SPECIFICATION

<b>Temperature Range</b>	-55 to 100 °C			
<b>Voltage Range</b>	160Vdc (90Vac) to 2000Vdc (700Vac) @ f≤1kHz			
<b>Capacitance Tolerance</b>	±5% (J), ±10% (K), ±20% (M)			
<b>Test Voltage</b>	1.6 x Vd.c. for 2 seconds			
<b>Dissipation factor tanδ (in 10<sup>-3</sup>) at 20 °C</b> <b>(Staked film technology)</b>		C≤0.1μF	0.1μF<C≤1μF	C>1μF
	at 1kHz	-	(0.5) 0.5	0.5
	10kHz	-	(1.5) 0.8	1.5
<b>Wound technology</b>	100kHz	(4.0) 5.0	-	-
<b>Insulation resistance at 20 °C, rel. humidity ≤65%</b>	C>0.33μF 30000s			

## OUTLINE DRAWING



## DIMENSIONS

Pitch P±0.4	Diameter d
7.5	0.5
10	0.5*/0.6
15	0.8
22.5	0.8
27.5	0.8
37.5	1.0

\* 0.5mm for capacitor width b=4mm

## ORDERING INFORMATION

LBPP	0.1	160	K	7.5
Range	Capacitance μF	Voltage	Tolerance	Pitch
			J = 5%	7.5
			K = 10%	10
			M = 20%	15
				22.5
				27.5
				37.5

**CASE DIMENSIONS (mm) - 7.5mm PITCH STACKED FILM TECHNOLOGY**

Capacitance	Voltage DC/AC														
	160V/90V			250V/140V			400V/200V			630V/400V			1000V/500V		
	b	h	l	b	h	l	b	h	l	b	h	l	b	h	l
1.5nF										4.0	8.5	10.0	4.0	8.5	10.0
2.2nF										4.0	8.5	10.0	4.0	8.5	10.0
3.3nF										4.0	8.5	10.0	5.0	10.5	10.0
4.7nF										4.0	8.5	10.0	5.0	10.5	10.0
6.8nF							4.0	8.5	10.0	5.0	10.5	10.0	6.0	12.0	10.0
10nF							4.0	8.5	10.0	5.0	10.5	10.0			
15nF							5.0	10.5	10.0	6.0	12.0	10.0			
22nF				4.0	8.5	10.0	5.0	10.5	10.0						
33nF	4.0	8.5	10.0	4.0	8.5	10.0	6.0	12.0	10.0						
47nF	4.0	8.5	10.0	5.0	10.5	10.0									
68nF	5.0	10.5	10.0	5.0	10.5	10.0									
0.1µF	5.0	10.5	10.0	6.0	12.0	10.0									
0.15µF	6.0	12.0	10.0												

**CASE DIMENSIONS (mm) - 10mm PITCH STACKED FILM TECHNOLOGY**

Capacitance	Voltage DC/AC														
	160V/90V			250V/140V			400V/200V			630V/400V			1000V/500V		
	b	h	l	b	h	l	b	h	l	b	h	l	b	h	l
2.2nF										4.0	7.0	13.0	4.0	9.0	13.0
3.3nF										4.0	9.0	13.0	4.0	9.0	13.0
4.7nF										4.0	9.0	13.0	4.0	9.0	13.0
6.8nF										4.0	9.0	13.0	5.0	11.0	13.0
10nF							4.0	9.0	13.0	4.0	9.0	13.0	6.0	12.0	13.0
15nF							4.0	9.0	13.0	5.0	11.0	13.0			
22nF							5.0	11.0	13.0	6.0	12.0	13.0			
33nF				4.0	9.0	13.0	5.0	11.0	13.0						
47nF	4.0	9.0	13.0	4.0	9.0	13.0	6.0	12.0	13.0						
68nF	4.0	9.0	13.0	5.0	11.0	13.0									
0.1µF	5.0	11.0	13.0	6.0	12.0	13.0									
0.15µF	5.0	11.0	13.0												
0.22µF	6.0	12.0	13.0												

**CASE DIMENSIONS (mm) - 15mm PITCH STACKED FILM TECHNOLOGY**

Capacitance	Voltage DC/AC														
	160V/90V			250V/140V			400V/200V			630V/400V			1000V/500V		
	b	h	l	b	h	l	b	h	l	b	h	l	b	h	l
10nF													5.0	10.5	18.0
15nF													6.0	11.0	18.0
22nF													7.0	12.5	18.0
33nF										5.0	10.5	18.0	8.5	14.5	18.0
47nF							5.0	10.5	18.0	6.0	11.0	18.0	8.5	14.5	18.0
68nF							6.0	11.0	18.0	7.0	12.5	18.0			
0.1µF	5.0	10.5	18.0	5.0	10.5	18.0	7.0	12.5	18.0	8.5	14.5	18.0			
0.15µF	5.0	10.5	18.0	5.0	10.5	18.0	8.5	14.5	18.0	9.0	17.5	18.0			
0.22µF	5.0	10.5	18.0	6.0	11.0	18.0	9.0	17.5	18.0						
0.33µF	6.0	11.0	18.0	7.0	12.5	18.0									
0.47µF	7.0	12.5	18.0	8.5	14.5	18.0									
0.68µF	8.5	14.5	18.0	9.0	17.5	18.0									
1.0µF	9.0	17.5	18.0												

**CASE DIMENSIONS (mm) - 22.5mm PITCH**

Wound capacitor technology with internal series connection for Vdc≥1250V

Capacitance	Voltage DC/AC																							
	250V/160V			400V/200V			630V/250V			1000V/250V			1250V/500V			1600V/500V			2000V/700V					
	b	h	l	b	h	l	b	h	l	b	h	l	b	h	l	b	h	l	b	h	l			
1.0nF																					6.0	15.0	26.5	
1.5nF																						6.0	15.0	26.5
2.2nF																						6.0	15.0	26.5
3.3nF																						6.0	15.0	26.5
4.7nF																						6.0	15.0	26.5
6.8nF																	6.0	15.0	26.5			8.5	16.5	26.5
10nF																6.0	15.0	26.5			10.5	16.5	26.5	
15nF																7.0	16.0	26.5			11.0	20.5	26.5	
22nF													6.0	15.0	26.5	8.5	16.5	26.5						
33nF										6.0	15.0	26.5	6.0	15.0	26.5	10.5	16.5	26.5						
47nF										6.0	15.0	26.5	8.5	16.5	26.5	11.0	20.5	26.5						
68nF										6.0	15.0	26.5	10.5	16.5	26.5									
0.1µF							6.0	15.0	26.5	8.5	16.5	26.5	11.0	20.5	26.5									
0.15µF				6.0	15.0	26.5	6.0	15.0	26.5	10.5	16.5	26.5												
0.22µF	6.0	15.0	26.5	6.0	15.0	26.5	8.5	16.5	26.5	11.0	20.5	26.5												
0.33µF	6.0	15.0	26.5	7.0	16.0	26.5	10.5	16.5	26.5															
0.47µF	7.0	16.0	26.5	8.5	16.5	26.5	11.0	20.5	26.5															
0.68µF	8.5	16.5	26.5	10.5	16.5	26.5																		
1.0µF	10.5	16.5	26.5	11.0	20.5	26.5																		

**CASE DIMENSIONS (mm) - 27.5mm PITCH**

Wound capacitor technology with internal series connection for Vdc≥1250V

Capacitance	Voltage DC/AC																							
	250V/160V			400V/200V			630V/250V			1000V/250V			1250V/250V			1600V/500V			2000V/700V					
	b	h	l	b	h	l	b	h	l	b	h	l	b	h	l	b	h	l	b	h	l			
22nF																						11.0	21.0	31.5
33nF																						13.5	23.0	31.5
47nF																11.0	21.0	31.5			18.0	27.5	31.5	
68nF															11.0	21.0	31.5			19.0	30.0	31.5		
0.10µF													11.0	21.0	31.5	14.0	24.5	31.5						
0.15µF													11.0	21.0	31.5	18.0	27.5	31.5						
0.22µF											11.0	21.0	31.5	14.0	24.5	31.5								
0.33µF											11.0	21.0	31.5	18.0	27.5	31.5								
0.47µF											14.0	24.5	31.5											
0.68µF							11.0	21.0	31.5	18.0	27.5	31.5												
1.0µF				11.0	21.0	31.5	18.0	27.5	31.5															
1.5µF	11.0	21.0	31.5	12.5	21.5	31.5	18.0	27.5	31.5															
2.2µF	12.5	21.5	31.5	14.0	24.5	31.5																		
3.3µF	15.0	24.5	31.5	19.0	30.0	31.5																		
4.7µF	18.0	27.5	31.5																					

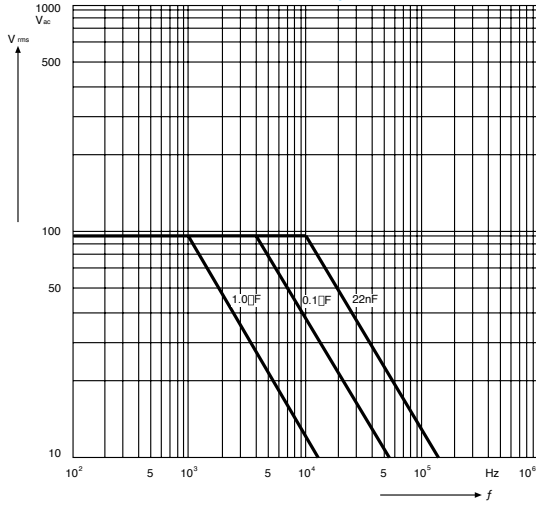
**CASE DIMENSIONS (mm) - 37.5mm PITCH**

Wound capacitor technology with internal series connection for Vdc≥1250V

Capacitance	Voltage DC/AC					
	1000V/500V			1250V/500V		
	b	h	l	b	h	l
0.33µF				16.0	28.5	41.5
0.47µF	14.0	25.0	41.5	18.0	32.5	41.5
0.68µF	16.0	28.5	41.5	20.0	39.5	41.5
1.0µF	20.0	39.5	41.5			

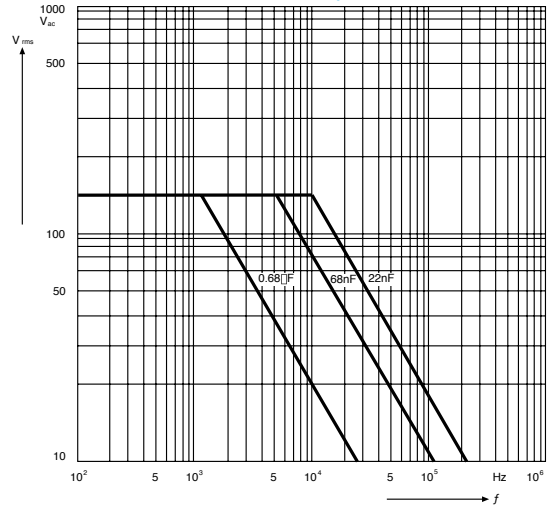
AC VOLTAGE  $V_{rms}$  VERSUS FREQUENCY  $f$

7.5mm-15mm PITCH-160Vdc / 90Vac



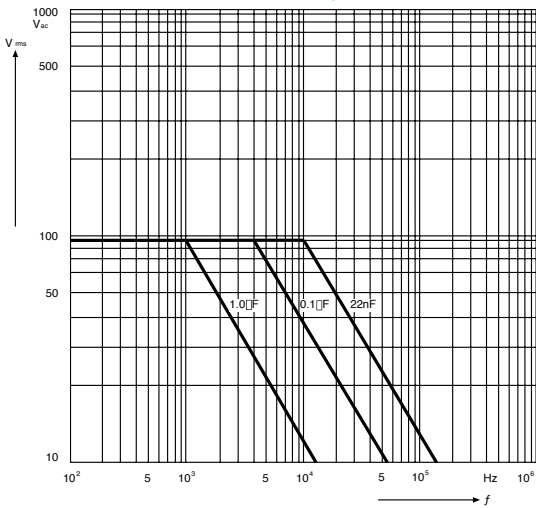
AC VOLTAGE  $V_{rms}$  VERSUS FREQUENCY  $f$

7.5mm-15mm PITCH-250Vdc / 140Vac



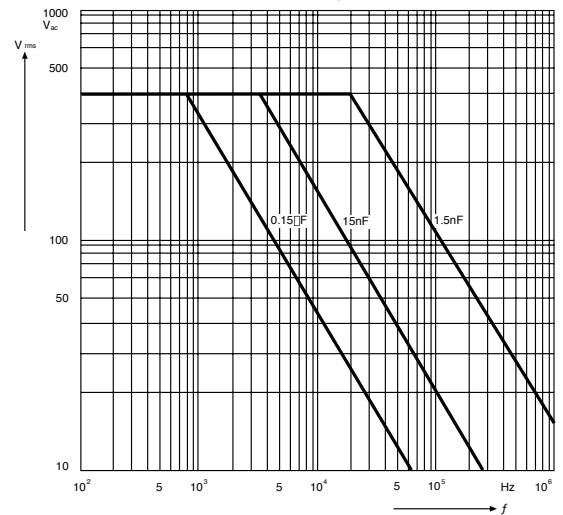
AC VOLTAGE  $V_{rms}$  VERSUS FREQUENCY  $f$

7.5mm-15mm PITCH-400Vdc / 200Vac



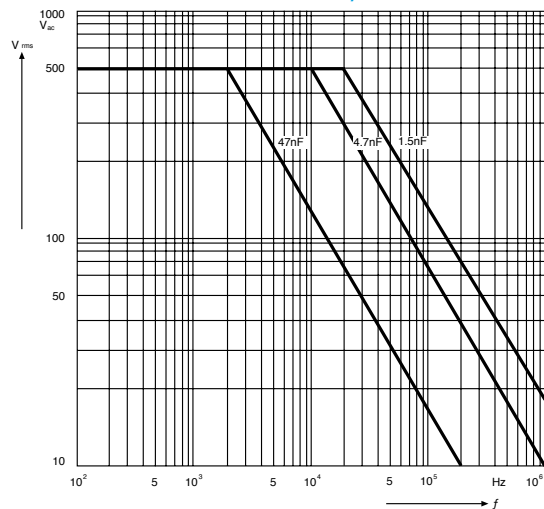
AC VOLTAGE  $V_{rms}$  VERSUS FREQUENCY  $f$

7.5mm-15mm PITCH-630Vdc / 400Vac



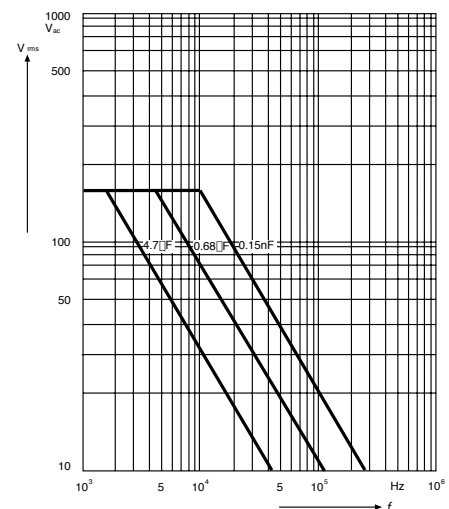
AC VOLTAGE  $V_{rms}$  VERSUS FREQUENCY  $f$

7.5mm-15mm PITCH-1000Vdc / 500Vac



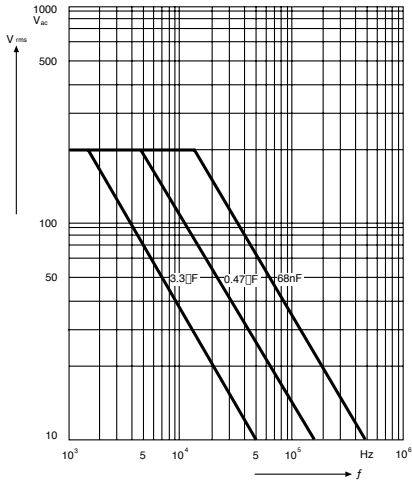
AC VOLTAGE  $V_{rms}$  VERSUS FREQUENCY  $f$

22.5mm-37.5mm PITCH-250Vdc / 10Vac



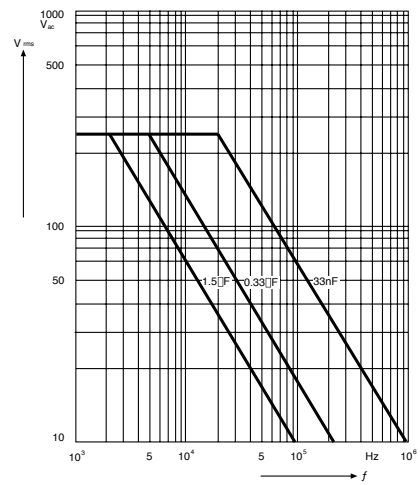
AC VOLTAGE  $V_{rms}$  VERSUS FREQUENCY  $f$

22.5mm-35.7mm PITCH-400Vdc / 200Vac



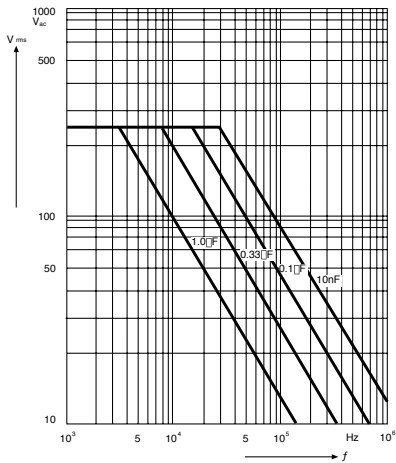
AC VOLTAGE  $V_{rms}$  VERSUS FREQUENCY  $f$

22.5mm-37.5mm PITCH-630Vdc / 250Vac



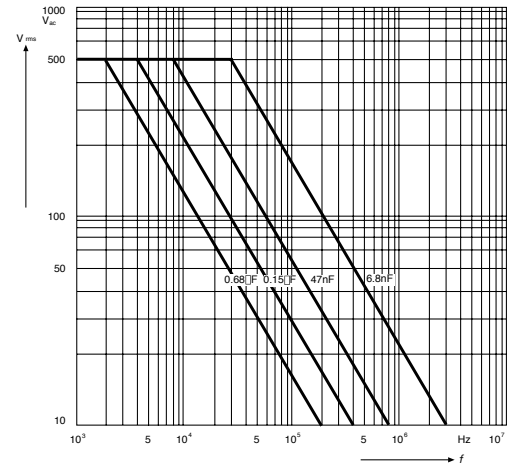
AC VOLTAGE  $V_{rms}$  VERSUS FREQUENCY  $f$

22.5mm-37.5mm PITCH-1000Vdc / 250Vac



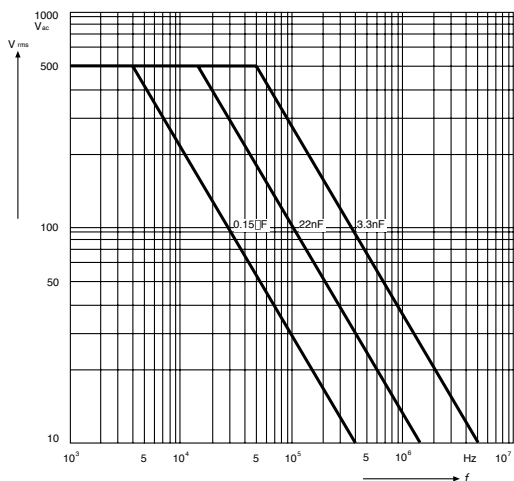
AC VOLTAGE  $V_{rms}$  VERSUS FREQUENCY  $f$

22.5mm-37.5mm PITCH-1250Vdc / 500Vac



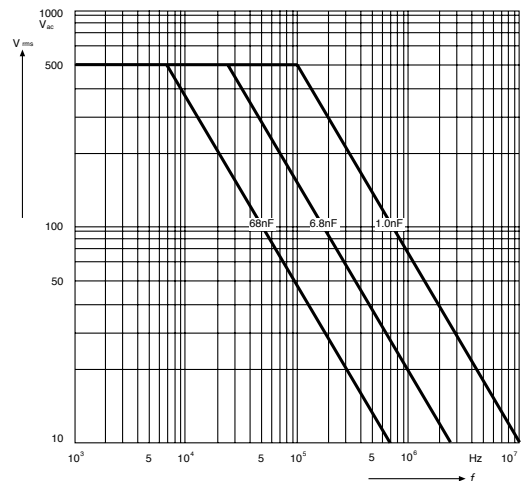
AC VOLTAGE  $V_{rms}$  VERSUS FREQUENCY  $f$

22.5mm-37.5mm PITCH-1600Vdc / 500Vac

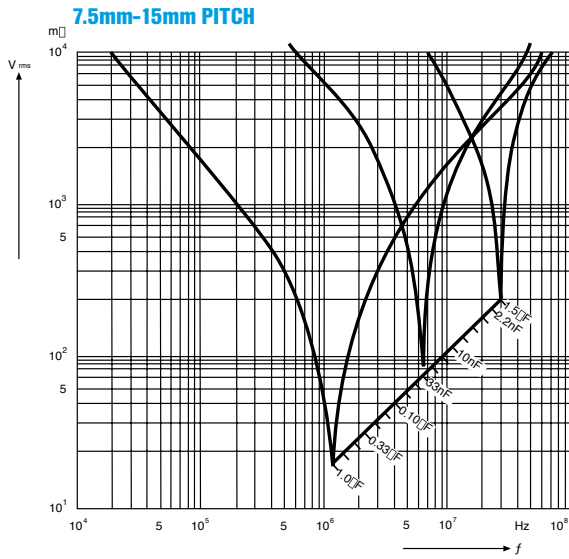


AC VOLTAGE  $V_{rms}$  VERSUS FREQUENCY  $f$

22.5mm-37.5mm PITCH-2000Vdc / 700Vac



IMPEDANCE Z VERSUS FREQUENCY F (TYPICAL VALUES)



IMPEDANCE Z VERSUS FREQUENCY F (TYPICAL VALUES)

