

AC FILTERING CAPACITORS

TYPE KNB1910, KNB1914



APPLICATIONS

- INPUT/OUTPUT AC FILTERS FOR POWER CONVERTERS
- SWITCHING MODE POWER SUPPLIES (SMPS)
- SOLAR POWER PLANTS
- WIND PLANTS
- MOTOR DRIVES
- INDUCTION HEATERS
- FREQUENCY INVERTERS
- UNINTERRUPTIBLE POWER SUPPLIES (UPS)

REFERENCE STANDARD

- IEC 61071
- AEC-Q200 (ON REQUEST)

FEATURES

- SELF-HEALING PROPERTIES
- HIGH RIPPLE CURRENT
- HIGH RELIABILITY
- LOW LOSSES
- SMALL DIMENSIONS
- DESIGNED FOR PCB MOUNTING

SPECIFICATIONS

• RATED CAPACITANCE	0.1 µF UP TO 80 µF
• CAPACITANCE TOLERANCE	± 5 %, ± 10 %
• RATED RMS VOLTAGE U_{rms}	250 V AC, 300 V AC, 350 V AC, 400 V AC, 440 V AC
• TEST VOLTAGE (BETWEEN TERMINALS)	$1.5 \times U_{NDCr}$, 10 s
• SELF-INDUCTANCE	< 1 nH PER mm OF PITCH
• INSULATION RESISTANCE BETWEEN TERMINALS	$R \times C \geq 30\,000 \leq$ AFTER 1 min AT 500 V
• OPERATING TEMPERATURE RANGE	-40 °C TO 85 °C
• MAX. HOT SPOT TEMPERATURE	105 °C
• CLIMATIC CATEGORY	40/85/56 ACCORDING TO IEC 60068-1
• LIFE EXPECTANCY	$\geq 60\,000$ HOURS AT U_{rms} , $\theta_{hs} = 70$ °C
• FAILURE RATE	100 FIT



AC FILTERING CAPACITORS

TYPE KNB1910, KNB1914

GENERAL CHARACTERISTICS

CAPACITANCE RANGE

$U_{rms} @ 85\text{ °C} = 250\text{ V AC}$, $U_N @ 85\text{ °C} = 350\text{ V AC}$, $U_{NDC} @ 85\text{ °C} = 600\text{ V DC}$

C_N ⁽¹⁾ (μF)	Dimensions (mm) ⁽²⁾					$\tan(\delta)$ @1kHz ⁽³⁾ ($\times 10^{-4}$)	ESR@10 kHz ⁽⁴⁾ (m Ω)	I_{max} @10 kHz ⁽⁵⁾ (A)	$(dU/dt)_{max}$ (V/ μs)	\hat{I} (A)
	L	H	W	P	P1					
1	32.0	19.0	10.0	27.5	-	10	30.0	4.0	32	32
2	32.0	19.0	10.0	27.5	-	10	24.3	4.5	32	64
3	32.0	21.0	12.0	27.5	-	10	17.1	5.8	32	96
4	32.0	22.0	13.0	27.5	-	10	13.5	6.7	32	128
5	32.0	24.5	15.0	27.5	-	10	11.0	8.0	32	160
6	32.0	26.5	17.0	27.5	-	10	9.5	9.0	32	192
7	32.0	28.0	18.0	27.5	-	10	8.2	10.0	32	224
8	32.0	32.0	18.0	27.5	-	10	7.3	11.1	32	256
9	32.0	33.0	20.0	27.5	-/10.2	10	6.5	12.3	32	288
10	32.0	35.0	20.0	27.5	-/10.2	10	5.9	13.2	32	320
12	32.0	35.5	24.0	27.5	-/10.2	10	4.9	15.2	32	384
15	32.0	40.0	25.0	27.5	-/10.2	10	4.0	17.8	32	480
8	42.0	27.0	16.0	37.5	-	10	15.0	7.9	23	184
9	42.0	27.0	16.0	37.5	-	10	13.5	8.3	23	207
10	42.0	31.0	18.0	37.5	10.2	10	12.3	9.4	23	230
11	42.0	31.0	18.0	37.5	10.2	10	11.4	9.7	23	253
12	42.0	31.0	18.0	37.5	10.2	10	10.8	10.0	23	276
15	42.0	38.0	21.0	37.5	10.2	10	8.7	12.1	23	345
20	42.0	43.0	28.0	37.5	10.2	10	6.6	14.1	23	460
22	42.0	43.0	28.0	37.5	10.2	10	6.0	14.8	23	506
25	42.0	43.0	28.0	37.5	10.2	10	5.5	15.5	23	575
30	42.0	45.0	30.0	37.5	10.2/20.3	15	5.0	16.9	23	690
35	42.0	50.0	36.0	37.5	10.2/20.3	15	4.5	19.1	23	805
40	42.0	50.0	36.0	37.5	10.2/20.3	15	4.0	20.2	23	920
40	57.5	45.0	30.0	52.5	20.3	25	4.7	19.2	15	600
45	57.5	45.0	30.0	52.5	20.3	25	4.2	20.3	15	675
50	57.5	50.0	35.0	52.5	20.3	25	3.8	22.9	15	750
55	57.5	50.0	35.0	52.5	20.3	25	3.5	23.9	15	825
60	57.5	50.0	35.0	52.5	20.3	30	3.2	25.0	15	900
65	57.5	50.0	35.0	52.5	20.3	30	3.0	25.8	15	975
70	57.5	50.0	35.0	52.5	20.3	30	2.9	26.2	15	1050
75	57.5	55.0	40.0	52.5	20.3	30	2.8	27.4	15	1125
80	57.5	55.0	40.0	52.5	20.3	30	2.7	27.9	15	1200

NOTES:

⁽¹⁾ CAPACITANCE VALUE MEASURED AT 1 kHz. INTERMEDIATE CAPACITANCE VALUES AVAILABLE ON REQUEST.

⁽²⁾ NOMINAL DIMENSIONS.

⁽³⁾ MAXIMUM $\tan(\delta)$ VALUES.

⁽⁴⁾ TYPICAL EQUIVALENT SERIES RESISTANCE AT 10 kHz.

⁽⁵⁾ MAXIMUM R.M.S. CURRENT AT 10 kHz, $\theta_{amb} = 70\text{ °C}$ FOR $\Delta\theta_{case} \leq 20\text{ °C}$.

AC FILTERING CAPACITORS

TYPE KNB1910, KNB1914

GENERAL CHARACTERISTICS

CAPACITANCE RANGE

U_{rms} @ 85 °C = 300 V AC, U_N @ 85 °C = 420 V AC, U_{NDC} @ 85 °C = 750 V DC

C_N ⁽¹⁾ (μ F)	Dimensions (mm) ⁽²⁾					$\tan(\delta)$ @1kHz ⁽³⁾ ($\times 10^{-4}$)	ESR@10 kHz ⁽⁴⁾ (m Ω)	I_{max} @10 kHz ⁽⁵⁾ (A)	$(dU/dt)_{max}$ (V/ μ s)	\hat{I} (A)
	L	H	W	P	P1					
1	32.0	19.0	10.0	27.5	-	10	30.0	4.0	40	40
2	32.0	21.0	12.0	27.5	-	10	19.8	5.3	40	80
3	32.0	24.5	15.0	27.5	-	10	14.0	7.1	40	120
3.3	32.0	24.5	15.0	27.5	-	10	13.0	7.3	40	132
4	32.0	26.5	17.0	27.5	-	10	11.0	8.4	40	160
5	32.0	32.0	18.0	27.5	-	10	9.5	9.7	40	200
6	32.0	33.0	20.0	27.5	-/10.2	10	8.3	10.9	40	240
7	32.0	35.5	24.0	27.5	-/10.2	10	7.3	12.4	40	280
8	32.0	35.5	24.0	27.5	-/10.2	10	6.6	13.0	40	320
9	32.0	40.0	25.0	27.5	-/10.2	10	6.0	14.4	40	360
10	32.0	40.0	25.0	27.5	-/10.2	10	5.5	15.1	40	400
5	42.0	27.0	16.0	37.5	-	10	17.0	7.4	28	140
5.6	42.0	27.0	16.0	37.5	-	10	15.4	7.8	28	157
6	42.0	31.0	18.0	37.5	10.2	10	14.5	8.6	28	168
7	42.0	31.0	18.0	37.5	10.2	10	13.2	9.0	28	196
7.5	42.0	38.0	21.0	37.5	10.2	10	12.5	10.1	28	210
8	42.0	38.0	21.0	37.5	10.2	10	12.0	10.3	28	224
9	42.0	38.0	21.0	37.5	10.2	10	11.0	10.7	28	252
10	42.0	38.0	21.0	37.5	10.2	10	10.0	11.3	28	280
12	42.0	43.0	28.0	37.5	10.2	10	8.5	12.4	28	336
15	42.0	43.0	28.0	37.5	10.2	10	6.8	13.9	28	420
16	42.0	43.0	28.0	37.5	10.2	10	6.5	14.2	28	448
20	42.0	45.0	30.0	37.5	10.2/20.3	15	5.3	16.4	28	560
25	42.0	50.0	36.0	37.5	10.2/20.3	15	4.3	19.5	28	700
25	57.5	45.0	30.0	52.5	20.3	15	6.8	16.0	19	475
30	57.5	50.0	35.0	52.5	20.3	15	5.8	18.5	19	570
35	57.5	50.0	35.0	52.5	20.3	20	5.0	20.0	19	665
40	57.5	50.0	35.0	52.5	20.3	20	4.4	19.9	19	760
45	57.5	55.0	40.0	52.5	20.3	20	4.0	22.9	19	855
50	57.5	55.0	40.0	52.5	20.3	20	3.6	24.2	19	950
55	57.5	55.0	40.0	52.5	20.3	20	3.3	25.3	19	1045

NOTES:

⁽¹⁾ CAPACITANCE VALUE MEASURED AT 1 kHz. INTERMEDIATE CAPACITANCE VALUES AVAILABLE ON REQUEST.

⁽²⁾ NOMINAL DIMENSIONS.

⁽³⁾ MAXIMUM $\tan(\delta)$ VALUES.

⁽⁴⁾ TYPICAL EQUIVALENT SERIES RESISTANCE AT 10 kHz.

⁽⁵⁾ MAXIMUM R.M.S. CURRENT AT 10 kHz, $\theta_{amb} = 70^\circ\text{C}$ FOR $\Delta\theta_{case} \leq 20^\circ\text{C}$.

AC FILTERING CAPACITORS

TYPE KNB1910, KNB1914

GENERAL CHARACTERISTICS

CAPACITANCE RANGE

U_{rms} @ 85 °C = 350 V AC, U_N @ 85 °C = 490 V AC, U_{ndc} @ 85 °C = 900 V DC

C_N ⁽¹⁾ (μ F)	Dimensions (mm) ⁽²⁾					$\tan(\delta)$ @1kHz ⁽³⁾ ($\times 10^{-4}$)	ESR@10 kHz ⁽⁴⁾ (m Ω)	I_{max} @10 kHz ⁽⁵⁾ (A)	$(dU/dt)_{max}$ (V/ μ s)	\hat{I} (A)
	L	H	W	P	P1					
1	32.0	19.0	10.0	27.5	-	10	30.0	4.0	50	50
1.2	32.0	21.0	12.0	27.5	-	10	25.0	4.8	50	60
2	32.0	24.5	15.0	27.5	-	10	17.0	6.4	50	100
2.2	32.0	24.5	15.0	27.5	-	10	16.0	6.6	50	110
3	32.0	28.0	18.0	27.5	-	10	12.5	8.1	50	150
3.3	32.0	32.0	18.0	27.5	-	10	11.5	8.8	50	165
4	32.0	32.0	18.0	27.5	-	10	9.8	9.6	50	200
5	32.0	35.0	20.0	27.5	-/10.2	10	8.5	10.9	50	250
6	32.0	35.5	24.0	27.5	-/10.2	10	7.5	12.2	50	300
7	32.0	40.0	25.0	27.5	-/10.2	10	6.8	13.6	50	350
7.5	32.0	40.0	25.0	27.5	-/10.2	10	6.5	13.9	50	375
4	42.0	27.0	16.0	37.5	-	10	19.0	7.0	35	140
5	42.0	31.0	18.0	37.5	10.2	10	16.0	8.2	35	175
6	42.0	38.0	21.0	37.5	10.2	10	13.5	9.7	35	210
7	42.0	38.0	21.0	37.5	10.2	10	11.8	10.4	35	245
8	42.0	38.0	21.0	37.5	10.2	10	10.5	11.0	35	280
9	42.0	43.0	28.0	37.5	10.2	10	9.5	11.8	35	315
10	42.0	43.0	28.0	37.5	10.2	10	8.8	12.2	35	350
12	42.0	43.0	28.0	37.5	10.2	10	7.3	13.4	35	420
14	42.0	45.0	30.0	37.5	10.2/20.3	15	6.5	14.8	35	490
15	42.0	45.0	30.0	37.5	10.2/20.3	15	6.0	15.4	35	525
18	42.0	50.0	36.0	37.5	10.2/20.3	15	5.0	18.1	35	630
20	42.0	50.0	36.0	37.5	10.2/20.3	15	4.5	19.1	35	700
18	57.5	45.0	30.0	52.5	20.3	15	8.7	14.1	23	414
20	57.5	45.0	30.0	52.5	20.3	15	7.9	14.8	23	460
22	57.5	50.0	35.0	52.5	20.3	20	7.2	16.6	23	506
24	57.5	50.0	35.0	52.5	20.3	20	6.7	17.3	23	552
25	57.5	50.0	35.0	52.5	20.3	20	6.5	17.5	23	575
26	57.5	50.0	35.0	52.5	20.3	20	6.3	17.8	23	598
30	57.5	55.0	40.0	52.5	20.3	20	5.5	19.6	23	690
35	57.5	55.0	40.0	52.5	20.3	20	4.8	20.9	23	805

NOTES:

⁽¹⁾ CAPACITANCE VALUE MEASURED AT 1 kHz. INTERMEDIATE CAPACITANCE VALUES AVAILABLE ON REQUEST.

⁽²⁾ NOMINAL DIMENSIONS.

⁽³⁾ MAXIMUM $\tan(\delta)$ VALUES.

⁽⁴⁾ TYPICAL EQUIVALENT SERIES RESISTANCE AT 10 kHz.

⁽⁵⁾ MAXIMUM R.M.S. CURRENT AT 10 kHz, $\theta_{amb} = 70^\circ\text{C}$ FOR $\Delta\theta_{case} \leq 20^\circ\text{C}$.

AC FILTERING CAPACITORS

TYPE KNB1910, KNB1914

GENERAL CHARACTERISTICS

CAPACITANCE RANGE

$U_{rms} @ 85\text{ °C} = 400\text{ V AC}$, $U_N @ 85\text{ °C} = 560\text{ V AC}$, $U_{NDC} @ 85\text{ °C} = 1000\text{ V DC}$

$C_N^{(1)}$ (μF)	Dimensions (mm) ⁽²⁾					$\tan(\delta)@1\text{kHz}^{(3)}$ ($\times 10^{-4}$)	ESR@10 kHz ⁽⁴⁾ (m Ω)	$I_{max}@10\text{ kHz}^{(5)}$ (A)	$(dU/dt)_{max}$ (V/ μs)	\hat{I} (A)
	L	H	W	P	P1					
0.47	32.0	16.0	7.5	27.5	-	10	45.0	2.9	57	27
0.56	32.0	17.0	9.0	27.5	-	10	40.0	3.3	57	32
0.68	32.0	19.0	10.0	27.5	-	10	38.0	3.6	57	39
0.82	32.0	21.0	12.0	27.5	-	10	33.0	4.1	57	47
1	32.0	21.0	12.0	27.5	-	10	28.0	4.5	57	57
1.5	32.0	24.5	15.0	27.5	-	10	20.0	5.9	57	86
2	32.0	26.5	17.0	27.5	-	10	16.0	6.9	57	114
2.2	32.0	26.5	17.0	27.5	-	10	15.0	7.2	57	125
3	32.0	33.0	20.0	27.5	-/10.2	10	11.5	9.2	57	171
3.5	32.0	35.0	20.0	27.5	-/10.2	10	10.5	9.8	57	200
5	32.0	40.0	25.0	27.5	-/10.2	10	7.5	12.9	57	285
2.7	42.0	27.0	16.0	37.5	-	10	20.0	6.8	40	108
3	42.0	31.0	18.0	37.5	10.2	10	19.0	7.5	40	120
3.5	42.0	31.0	18.0	37.5	10.2	10	17.0	8.0	40	140
4	42.0	38.0	21.0	37.5	10.2	10	15.0	9.2	40	160
5	42.0	38.0	21.0	37.5	10.2	10	12.0	10.3	40	200
6	42.0	43.0	28.0	37.5	10.2	10	10.3	11.3	40	240
7	42.0	43.0	28.0	37.5	10.2	10	9.0	12.1	40	280
7.5	42.0	43.0	28.0	37.5	10.2	10	8.6	12.4	40	300
8	42.0	43.0	28.0	37.5	10.2	10	8.3	12.6	40	320
9	42.0	45.0	30.0	37.5	10.2/20.3	10	7.6	13.7	40	360
10	42.0	45.0	30.0	37.5	10.2/20.3	15	7.0	14.3	40	400
12	42.0	50.0	36.0	37.5	10.2/20.3	15	6.0	16.5	40	480
13	42.0	50.0	36.0	37.5	10.2/20.3	15	5.6	17.1	40	520
13	57.5	45.0	30.0	52.5	20.3	15	8.2	14.6	27	351
14	57.5	45.0	30.0	52.5	20.3	15	7.7	15.0	27	378
15	57.5	45.0	30.0	52.5	20.3	20	7.3	15.4	27	405
16	57.5	50.0	35.0	52.5	20.3	20	7.0	16.9	27	432
18	57.5	50.0	35.0	52.5	20.3	20	6.3	17.8	27	486
20	57.5	50.0	35.0	52.5	20.3	20	5.7	18.7	27	540
22	57.5	55.0	40.0	52.5	20.3	20	5.2	20.1	27	594
25	57.5	55.0	40.0	52.5	20.3	20	4.6	21.4	27	675
26	57.5	55.0	40.0	52.5	20.3	20	4.4	21.9	27	702

NOTES:

⁽¹⁾ CAPACITANCE VALUE MEASURED AT 1 kHz. INTERMEDIATE CAPACITANCE VALUES AVAILABLE ON REQUEST.

⁽²⁾ NOMINAL DIMENSIONS.

⁽³⁾ MAXIMUM $\tan(\delta)$ VALUES.

⁽⁴⁾ TYPICAL EQUIVALENT SERIES RESISTANCE AT 10 kHz.

⁽⁵⁾ MAXIMUM R.M.S. CURRENT AT 10 kHz, $\theta_{amb} = 70\text{ °C}$ FOR $\Delta\theta_{case} \leq 20\text{ °C}$.

AC FILTERING CAPACITORS

TYPE KNB1910, KNB1914

GENERAL CHARACTERISTICS

CAPACITANCE RANGE

$U_{rms} @ 85\text{ °C} = 440\text{ V AC}$, $U_N @ 85\text{ °C} = 620\text{ V AC}$, $U_{NDC} @ 85\text{ °C} = 1100\text{ V DC}$

C_N ⁽¹⁾ (μF)	Dimensions (mm) ⁽²⁾					$\tan(\delta)@1\text{kHz}$ ⁽³⁾ ($\times 10^{-4}$)	ESR@10 kHz ⁽⁴⁾ (m Ω)	$I_{max}@10\text{ kHz}$ ⁽⁵⁾ (A)	$(dU/dt)_{max}$ (V/ μs)	\hat{i} (A)
	L	H	W	P	P1					
0.1	32.0	16.0	7.5	27.5	-	10	100.0	2.0	150	15
0.15	32.0	16.0	7.5	27.5	-	10	70.0	2.4	150	23
0.22	32.0	17.0	9.0	27.5	-	10	55.0	2.8	150	33
0.33	32.0	17.0	9.0	27.5	-	10	45.0	3.1	150	50
0.47	32.0	19.0	10.0	27.5	-	10	35.0	3.7	150	71
0.56	32.0	21.0	12.0	27.5	-	10	33.0	4.1	150	84
0.68	32.0	22.0	13.0	27.5	-	10	30.0	4.5	150	102
0.82	32.0	24.5	15.0	27.5	-	10	25.0	5.1	150	123
1	32.0	24.5	15.0	27.5	-	10	22.0	5.6	150	150
1.5	32.0	28.0	18.0	27.5	-	10	16.0	7.2	150	225
2	32.0	33.0	20.0	27.5	-/10.2	10	13.0	8.7	150	300
2.2	32.0	35.0	20.0	27.5	-/10.2	10	12.0	9.2	150	330
3	32.0	40.0	25.0	27.5	-/10.2	10	10.0	11.2	150	450
1.5	42.0	27.0	16.0	37.5	-	15	21.0	6.7	100	150
2	42.0	31.0	18.0	37.5	10.2	15	17.0	8.0	100	200
2.2	42.0	31.0	18.0	37.5	10.2	15	16.0	8.2	100	220
3	42.0	38.0	21.0	37.5	10.2	15	12.0	10.3	100	300
3.3	42.0	38.0	21.0	37.5	10.2	15	11.0	10.7	100	330
4	42.0	38.0	21.0	37.5	10.2	15	10.5	11.0	100	400
4.7	42.0	43.0	28.0	37.5	10.2	15	9.5	11.8	100	470
5	42.0	43.0	28.0	37.5	10.2	15	9.0	12.1	100	500
5.6	42.0	43.0	28.0	37.5	10.2	15	8.2	12.7	100	560
6	42.0	45.0	30.0	37.5	10.2/20.3	15	7.8	13.5	100	600
6.8	42.0	45.0	30.0	37.5	10.2/20.3	15	7.0	14.3	100	680
7	42.0	50.0	36.0	37.5	10.2/20.3	15	6.9	15.4	100	700
8	42.0	50.0	36.0	37.5	10.2/20.3	15	6.2	16.3	100	800
8	57.5	45.0	30.0	52.5	20.3	20	6.5	16.4	65	520
9	57.5	45.0	30.0	52.5	20.3	20	6.2	16.7	65	585
10	57.5	45.0	30.0	52.5	20.3	20	5.8	17.3	65	650
12	57.5	50.0	35.0	52.5	20.3	20	5.0	20.0	65	780
15	57.5	55.0	40.0	52.5	20.3	20	4.1	22.7	65	975
16	57.5	55.0	40.0	52.5	20.3	20	4.0	22.9	65	1040
18	57.5	55.0	40.0	52.5	20.3	20	3.9	23.2	65	1170

NOTES:

⁽¹⁾ CAPACITANCE VALUE MEASURED AT 1 kHz. INTERMEDIATE CAPACITANCE VALUES AVAILABLE ON REQUEST.

⁽²⁾ NOMINAL DIMENSIONS.

⁽³⁾ MAXIMUM $\tan(\delta)$ VALUES.

⁽⁴⁾ TYPICAL EQUIVALENT SERIES RESISTANCE AT 10 kHz.

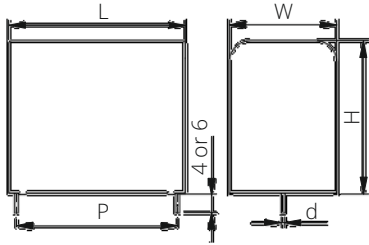
⁽⁵⁾ MAXIMUM R.M.S. CURRENT AT 10 kHz, $\theta_{amb} = 70\text{ °C}$ FOR $\Delta\theta_{case} \leq 20\text{ °C}$.

AC FILTERING CAPACITORS

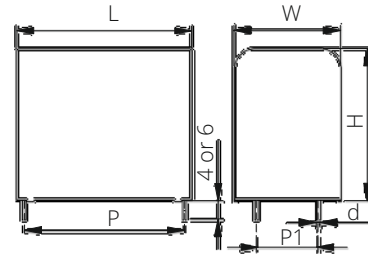
DIMENSIONS AND CONSTRUCTION

DIMENSIONS

KNB1910 (2 PINS)



KNB1914 (4 PINS)

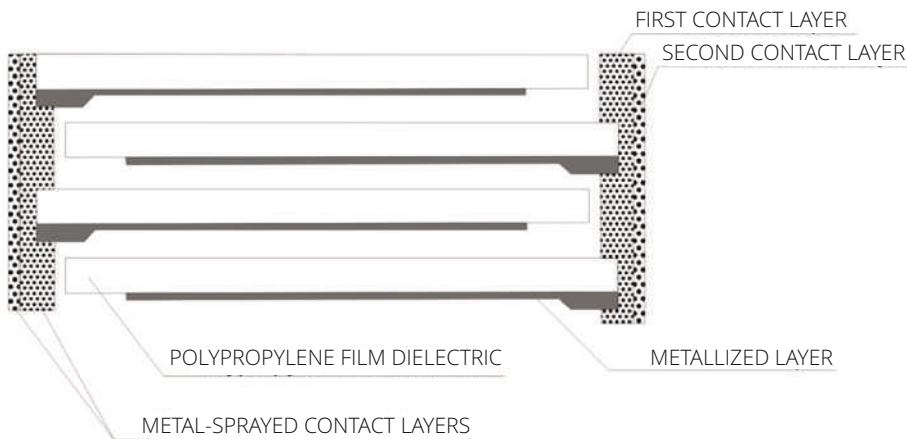


TERMINAL DIMENSIONS					MAX. BOX DIMENSIONS			
P (mm)	TOLERANCE (mm)	P1 (mm)	TOLERANCE (mm)	d (mm)	TOLERANCE (mm)	L _{max} (mm)	H _{max} (mm)	W _{max} (mm)
27.5	±0.5	-	-	0.8	±0.05	L + 0.5	H + 0.2	W + 0.5
27.5	±0.5	10.2	±0.5	1 OR 1.2	±0.05	L + 0.5	H + 0.2	W + 0.5
37.5	±0.5	-	±0.5	1 OR 1.2	±0.05	L + 0.5	H + 0.5	W + 0.5
37.5	±0.5	10.2	±0.5	1 OR 1.2	±0.05	L + 0.5	H + 0.5	W + 0.5
37.5	±0.5	20.3	±0.5	1 OR 1.2	±0.05	L + 0.5	H + 0.5	W + 0.5
52.5	±0.5	20.3	±0.5	1.2	±0.05	L + 1.0	H + 1.0	W + 1.0

CONSTRUCTION

- **DIELECTRIC:** POLYPROPYLENE FILM
- **CAPACITOR ELECTRODES:** VACUUM-DEPOSITED METAL LAYERS
- **CASING:** PLASTIC CASE WITH FLAME-RETARDANT EPOXY RESIN SEALING (UL 94V-0)
- **TERMINALS:** PARALLEL TINNED COPPER WIRE (2 OR 4 PINS)

INTERNAL CONSTRUCTION



NOTE: CAPACITORS WITH RATED RMS VOLTAGE 440 VAC HAVE AN INTERNAL SERIAL CONNECTION.

AC FILTERING CAPACITORS

CAUTIONS AND WARNINGS

CAUTIONS AND WARNINGS

MECHANICAL OVERLOADS



ATTENTION: THE CAPACITOR IS DESIGNED FOR MOUNTING ON A PC BOARD. DO NOT MOVE THE CAPACITOR, AFTER IT HAS BEEN SOLDERED TO THE PC BOARD. THE CAPACITOR SHOULD NOT BE MOUNTED ON PLACES WHERE VIBRATIONS OR ACCELERATIONS OCCUR. DO NOT EXCEED THE TESTED ABILITY TO WITHSTAND VIBRATION. AVOID ANY COMPRESSIVE, TENSILE OR FLEXURAL STRESS.

OVERLOAD



ATTENTION: DO NOT OVERLOAD THE CAPACITOR. AVOID OVERLOADING THE CAPACITOR AND CONSIDER THE FLAMMABILITY OF MATERIALS.

IMPULSES



ATTENTION: IF ELECTRIC ENERGY IMPULSES ARE HIGHER, DIELECTRIC WILL BREAK DOWN. AVOID EXTERNAL ELECTRIC ENERGY IMPULSE. THE PEAK VOLTAGE (U_p , AC) SHOULD NOT BE HIGHER THAN THE RATED DC VOLTAGE (U_{NDC}).

ENVIRONMENTAL CONDITIONS



ATTENTION: DO NOT EXCEED OPERATING TEMPERATURE. DO NOT EXPOSE THE CAPACITOR TO HUMIDITY LONGER THAN IT IS RECOMMENDED. DO NOT EXPOSE THE CAPACITOR TO INCREASED TEMPERATURE MORE THAN IT IS RECOMMENDED. THE DISSIPATION FACTOR MAY GO UP AND DOWN WITH INCREASED TEMPERATURE. AVOID EXTERNAL FIRE OR ELECTRICITY.