

# METALLIZED POLYPROPYLENE CAPACITORS 220 - 660 AC

## APPLICATIONS

Motor Run ---- HID Lighting ---- Ferro-Resonant Power Supplies ---- Filters ----  
Battery Chargers ---- Power Factor Correction ---- and Others.

## CONSTRUCTION

The "FILMET" capacitor is constructed using low loss polypropylene film dielectric on which a thin layer of metal has been deposited to one side to serve as the electrode. The two sheets are displaced forming a low loss non-inductive (extended foil) capacitor. Both ends of the winding are spray-metallized to provide a means to attach the copper tabs. The tabs are then spotwelded to the rivet on the underside of the cover and the cover is sealed to the case by a double-lock roll seam. The unit is completely filled with LEKTROL, a non-PCB fluid which is biodegradable, low toxic, and environmentally compatible. The thin layer of metal which is deposited on the film dielectric not only replaces the conventional aluminum foil electrodes but is self-healing, resulting in higher operating voltages and longer life.

## CHARACTERISTICS

Polypropylene film is a low loss dielectric possessing high voltage stress capabilities. These characteristics allow the polypropylene "FILMET" capacitor to consume less energy and result in smaller physical size per volt-ampere than the all paper or film-paper capacitor.

## CASE RUPTURE PROTECTION

Since the non-PCB impregnant is a combustible liquid, RONKEN has incorporated into the capacitor cover assembly an internal pressure sensitive current interrupting device. This minimizes capacitor case rupture by reacting to the cover bulging. The cover bulges due to the pressure build-up caused by the gassing and excessive temperature associated with end of life capacitor failures. As the cover bulges, the pressure sensitive interrupter internally disconnects the capacitor terminals from the external power source. Therefore, it is necessary to allow a minimum of 1/2" clearance above the capacitor terminals for the cover to bulge.

RONKEN capacitors incorporating the pressure sensitive interrupter are U.L. recognized under file #E78260.

## CAPACITANCE

The capacitance is rated in microfarads (MF) at 25°C. The capacitance change over the operating temperature range of -40°C to +90°C shall not exceed  $\pm 5\%$ .

## DISSIPATION FACTOR

The dissipation factor shall not exceed 0.1% when measured at the 60 HZ rated voltage and any case temperature between 25°C and 90°C.

## TEMPERATURE

The operating case temperature range is -40°C to +70°C. However, the 70°C capacitors may be operated up to 90°C maximum hot spot case temperature with proper voltage derating.

## FREQUENCY

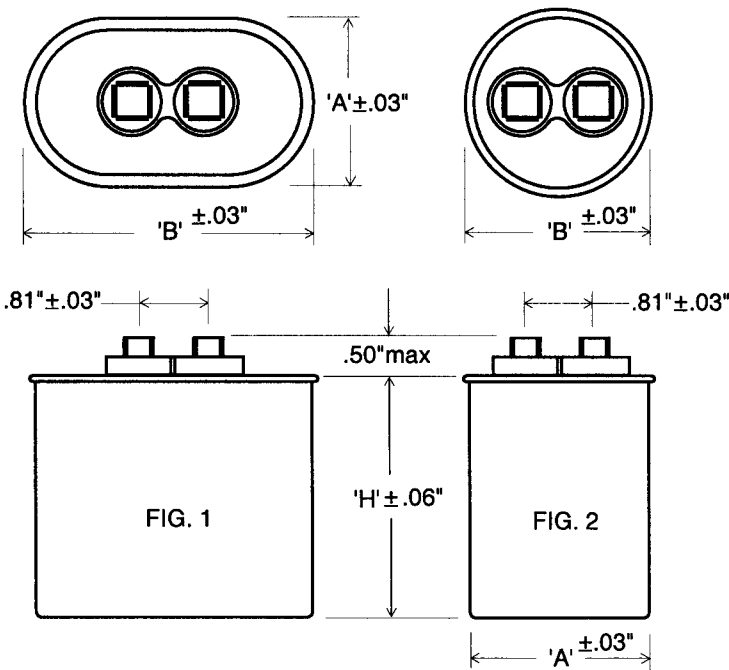
The capacitor may be operated at any sinusoidal frequency up to 66 HZ.

## LIFE

The capacitors are designed to provide a minimum of 60,000 hours life with a 94% survival when operated at rated voltage, frequency, and case temperature. Exceeding the capacitor ratings without proper derating will result in a reduction of full rated life.

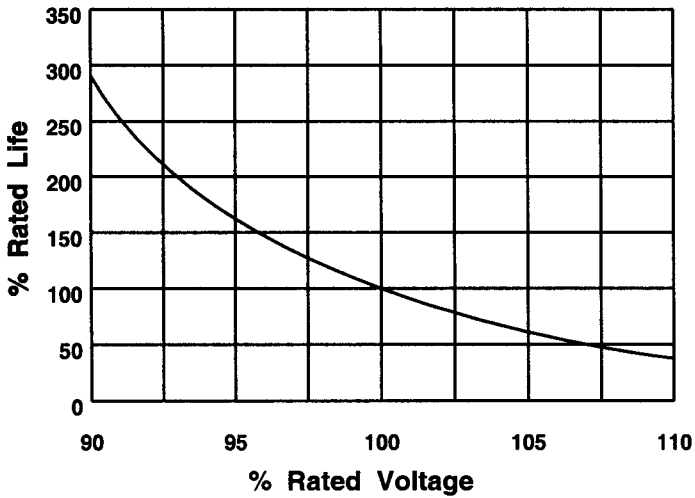
## LEAKAGE CURRENT

The leakage current shall not exceed 30 microamps when measured with 115 VAC 60 HZ applied between the shorted capacitor terminals and case.

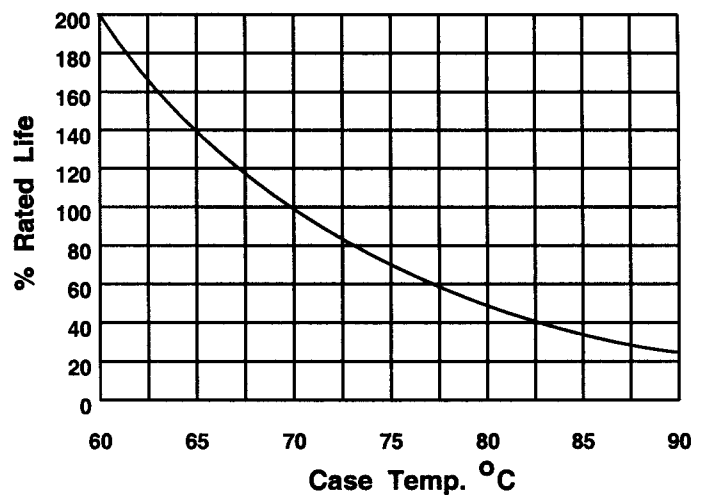


CASE STYLE	FIG. NO.	'A'	'B'
A	1	1.31	2.16
B	1	1.56	2.69
C	1	1.91	2.91
D	1	1.97	3.66
P	2	1.75	1.88
S	2	2.00	2.13
T	2	2.50	2.63

**Life vs Voltage**



**Life vs Case Temperature**



**RONKEN STANDARD CAPACITOR**

Tinplated steel case and cover.  
 Terminals have four 1/4" wide quick-connect blades with webbed cups.

Also available with-  
 Aluminum case and tinplated steel cover.  
 Terminals with two 1/4" wide quick-connect blades and one fork solder-lug.  
 Single cup insulators.  
 Color coded for capacitance ranges.

MF ±10%	220 VAC			240 VAC		
	CATALOG NO.	CASE STYLE	CASE HT.	CATALOG NO.	CASE STYLE	CASE HT.
	OVAL CASE			OVAL CASE		
15	P91A07156K05	A	2.88	P91A09156K05	A	2.88
20	P91A07206K05	A	2.88	P91A09206K05	A	3.88
25	P91A07256K05	A	3.88	P91A09256K05	A	4.75
30	P91A07306K05	A	3.88	P91A09306K05	A	4.75
30				P91B09306K05	B	3.88
35	P91A07356K05	A	4.75	P91B09356K05	B	4.75
35	P91B07356K05	B	2.88	P91C09356K05	C	2.88
40	P91A07406K05	A	4.75	P91B09406K05	B	4.75
40	P91B07406K05	B	3.88	P91C09406K05	C	3.88
45	P91B07456K05	B	3.88	P91C09456K05	C	3.88
45	P91C07456K05	C	2.88			
50	P91B07506K05	B	4.75	P91C09506K05	C	3.88
50	P91C07506K05	C	2.88			
60	P91B07606K05	B	4.75	P91C09606K05	C	4.75
60	P91C07606K05	C	3.88			
70	P91C07706K05	C	3.88	P91D09706K05	D	2.88
80	P91C07806K05	C	4.75	P91D09806K05	D	3.88
90	P91C07906K05	C	4.75	P91D09906K05	D	3.88
100	P91C07107K05	C	4.75	P91D09107K05	D	3.88
125	P91D07137K50	D	3.88	P91D09137K50	D	4.75
	ROUND CASE			ROUND CASE		
15	P91P07156K05	P	2.13	P91P09156K05	P	2.13
17.5	P91P07186K05	P	2.13	P91P09186K05	P	2.13
20	P91P07206K05	P	2.13	P91P09206K05	P	2.13
25	P91P07256K05	P	2.13	P91P09256K05	P	2.88
30	P91P07306K05	P	2.88	P91P09306K05	P	2.88
35	P91P07356K05	P	2.88	P91P09356K05	P	3.88
40	P91P07406K05	P	2.88	P91P09406K05	P	3.88
40				P91S09406K05	S	2.88
45	P91P07456K05	P	2.88	P91P09456K05	P	4.75
45				P91S09456K05	S	3.88
50	P91P07506K05	P	3.88	P91P09506K05	P	4.75
50				P91S09506K05	S	3.88
60	P91P07606K05	P	3.88	P91P09606K05	P	4.75
60	P91S07606K05	S	2.88	P91S09606K05	S	4.75
70	P91P07706K05	P	4.75	P91S09706K05	S	4.75
70	P91S07706K05	S	3.88	P91T09706K05	T	3.88
80	P91S07806K05	S	3.88	P91T09806K05	T	3.88
90	P91S07906K05	S	4.75	P91T09906K05	T	3.88
100	P91S07107K05	S	4.75	P91T09107K05	T	4.75
125	P91T07137K50	T	3.88	P91T09137K50	T	4.75

Consult factory for rating and sizes not listed.

MF ±10%	370 VAC			440 VAC		
	CATALOG NO.	CASE STYLE	CASE HT.	CATALOG NO.	CASE STYLE	CASE HT.
	OVAL CASE			OVAL CASE		
4	P91A12405K05	A	2.13	P91A15405K05	A	2.13
5	P91A12505K05	A	2.13	P91A15505H05	A	2.13
7.5	P91A12755K05	A	2.88	P91A15755K05	A	2.88
10	P91A12106K50	A	2.88	P91A15106K05	A	3.88
12.5	P91A12136K05	A	3.88	P91A15136K05	A	3.88
15	P91A12156K05	A	3.88	P91A15156K05	A	4.75
15				P91B15156K05	B	3.88
17.5	P91A12186K05	A	4.75	P91B15186K05	B	3.88
17.5	P91B12186K05	B	2.88	P91C15186K05	C	2.88
20	P91A12206K05	A	4.75	P91B15206K05	B	4.75
20	P91B12206K05	B	3.88	P91C15206K05	C	2.88
25	P91B12256K05	B	3.88	P91B15256K05	B	4.75
25	P91C12256K05	C	2.88	P91C15256K05	C	3.88
30	P91C12306K05	C	3.88	P91C15306K05	C	3.88
35	P91C12356K05	C	3.88	P91C15356K05	C	4.75
40	P91C12406K05	C	4.75	P91C15406K05	C	4.75
45	P91C12456K05	C	4.75	P91D15456K05	D	3.88
50	P91C12506K05	C	4.75	P91D15506K05	D	3.88
60	P91D12606K05	D	3.88	P91D15606K05	D	4.75
70	P91D12706K05	D	3.88	P91D15706K05	D	4.75
	ROUND CASE			ROUND CASE		
5	USE 440AC			P91P15505K05	P	2.13
6	USE 440AC			P91P15605K05	P	2.13
7.5	P91P12755K05	P	2.13	P91P15755K05	P	2.13
10	P91P12106K05	P	2.13	P91P15106K05	P	2.13
12.5	P91P12136K05	P	2.13	P91P15136K05	P	2.88
15	P91P12156K05	P	2.88	P91P15156K05	P	2.88
17.5	P91P12186K05	P	2.88	P91P15186K05	P	3.88
20	P91P12206K05	P	2.88	P91P15206K05	P	3.88
20				P91S15206K05	S	2.88
25	P91P12256K05	P	3.88	P91P15256K05	P	3.88
25	P91S12256K05	S	2.88	P91S15256K05	S	3.88
30	P91P12306K05	P	3.88	P91P15306K05	P	4.75
30	P91S12306K05	S	2.88	P91S15306K05	S	3.88
35	P91P12356K05	P	4.75	P91S15356K05	S	4.75
35	P91S12356K05	S	3.88	P91T15356K05	T	2.88
40	P91S12406K05	S	3.88	P91S15406K05	S	4.75
45	P91S12456K05	S	4.75	P91T15456K05	T	3.88
50	P91S12506K05	S	4.75	P91T15506K05	T	3.88
60	P91T12606K05	T	3.88	P91T15606K05	T	4.75
70	P91T12706K05	T	4.75	P91T15706K05	T	4.75

Consult factory for rating and sizes not listed.

MF ± 6%	525 VAC			600 VAC			660 VAC		
	CATALOG NO.	CASE STYLE	CASE HT.	CATALOG NO.	CASE STYLE	CASE HT.	CATALOG NO.	CASE STYLE	CASE HT.
	OVAL CASE			OVAL CASE			OVAL CASE		
1	USE 660AC			USE 660AC			P91A24105H05	A	2.13
2	USE 660AC			P91A22205H05	A	2.13	P91A23205H05	A	2.13
3	P91A19305H05	A	2.13	P91A22305H05	A	2.13	P91A23305H05	A	2.88
4	P91A19405H05	A	2.13	P91A22405H05	A	2.88	P91A23405H05	A	2.88
5	P91A19505H05	A	2.88	P91A22505H05	A	2.88	P91A23505H05	A	3.88
6	P91A19605H05	A	2.88	P91A22605H05	A	3.88	P91A23605H05	A	3.88
7	P91A19705H05	A	3.88	P91A22708H05	A	3.88	P91A23705H05	A	4.75
8	P91A19805H05	A	3.88	P91A22805H05	A	4.75	P91A23805H05	A	4.75
10	P91A19106H05	A	4.75	P91B22106H05	B	3.88	P91B23106H05	B	3.88
10	P91B19106H05	B	2.88	P91C22106H05	C	2.88	P91C23106H05	C	2.88
12	P91A19126H05	A	4.75	P91B22126H05	B	3.88	P91B23126H05	B	4.75
12	P91B19126H05	B	3.88	P91C22126H05	C	2.88	P91C23126H05	C	3.88
15	P91B19156H05	B	3.88	P91B22156H05	B	3.88	P91B23156H05	B	5.75
15	P91C19156H05	C	2.88	P91C22156H05	C	3.88	P91C23156H05	C	3.88
18	P91C19186H05	C	3.88	P91C22186H05	C	3.88	P91C23186H05	C	4.75
20	P91C19206H05	C	3.88	P91C22206H05	C	4.75	P91C23206H05	C	4.75
25	P91C19256H05	C	4.75	P91C22256H05	C	4.75	P91C23256H05	C	5.75
30	P91C19306H05	C	4.75	P91D22306H05	D	3.88	P91D23306H05	D	3.88
35	P91D19356H05	D	3.88	P91D22356H05	D	3.88	P91D23356H05	D	4.75
40	P91D19406H05	D	3.88	P91D22406H05	D	4.75	P91D23406H05	D	4.75
	ROUND CASE			ROUND CASE			ROUND CASE		
6	P91P19605H05	P	2.13	P91P22605H05	P	2.13	P91P23605H05	P	2.88
7	P91P19705H05	P	2.13	P91P22705H05	P	2.13	P91P23705H05	P	2.88
8	P91P19805H05	P	2.13	P91P22805H05	P	2.88	P91P23805H05	P	2.88
10	P91P19106H05	P	2.88	P91P22106H05	P	2.88	P91P23106H05	P	3.88
10							P91S23106H05	S	2.88
12	P91P19126H05	P	2.88	P91P22126H05	P	3.88	P91P23126H05	P	3.88
12							P91S23126H05	S	2.88
15	P91P19156H05	P	3.88	P91P22156H05	P	3.88	P91P23156H05	P	4.75
15							P91S23156H05	S	3.88
18	P91P19186H05	P	3.88	P91P22186H05	P	4.75	P91P23186H05	P	4.75
18	P91S19186H05	S	2.88	P91S22186H05	S	3.88	P91T23186H05	T	2.88
20	P91P19206H05	P	4.75	P91P22206H05	P	4.75	P91S23206H05	S	4.75
20	P91S19206H05	S	3.88	P91S22206H05	S	4.75	P91T23206H05	T	2.88
25	P91P19256H05	P	4.75	P91S22256H05	S	4.75	P91S23256H05	S	5.75
25	P91S19256H05	S	3.88	P91T22256H05	T	3.88	P91T23256H05	T	3.88
30	P91S19306H05	S	4.75	P91T22306H05	T	3.88	P91T23306H05	T	4.75
35	P91S19356H05	S	4.75	P91T22356H05	T	4.75	P91T23356H05	T	4.75
40	P91T19406H05	T	3.88	P91T22406H05	T	4.75	P91T23406H05	T	5.75
45	P91T19456H05	T	4.75	P91T22456H05	T	4.75	P91T23456H05	T	5.75
50	P91T19506H05	T	4.75	P91T22506H05	T	5.75	P91T23506H05	T	7.62

Consult factory for rating and sizes not listed.