

HIGH VOLTAGE FILM - PAPER CAPACITORS 1000 - 4000 AC

APPLICATIONS

HID Lighting ---- Ferro-Resonant Power Supplies ---- Ultra Violet Light Curing ----
Reprographics ---- Microwave Oven ---- and Others.

CONSTRUCTION

The capacitor is constructed by winding alternate layers of capacitor grade kraft paper and low loss polypropylene film between high grade aluminum foil electrodes. Tinned copper tabs attached to aluminum foil flags are inserted at predetermined intervals during the winding process to make low loss electrical connections to the foil electrodes. The extended tabs are spotwelded to the terminal rivet on the underside of the cover and the cover is sealed to the case by a double-locked roll seam. The unit is completely impregnated with LEKTROL, a non-PCB fluid which is biodegradable, low toxic, and environmentally compatible.

CHARACTERISTICS

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

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 ± 5%.

DISSIPATION FACTOR

The dissipation factor shall not exceed 0.3% when measured at the 60 HZ rated voltage and any case temperature between 25°C and 90°C.

TEMPERATURE

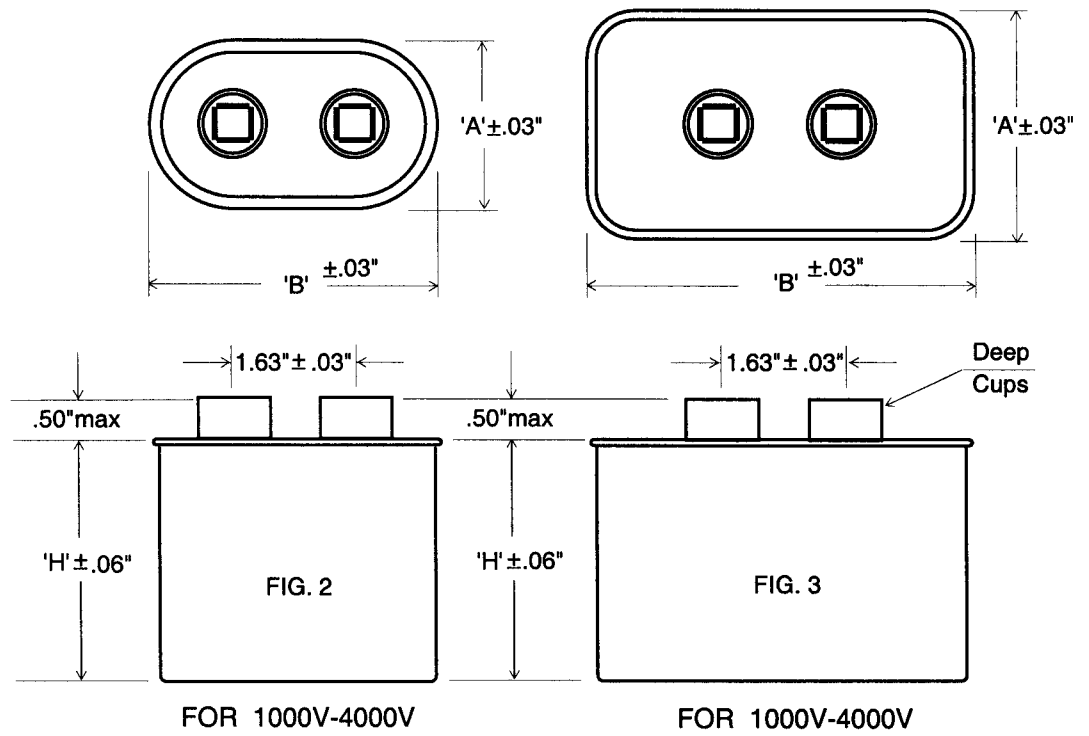
The operating case temperature range is -40°C to +70°C. However, the 70°C capacitors may be operated up to 90°C maximum hot spot case temperature with proper voltage derating.

FREQUENCY

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

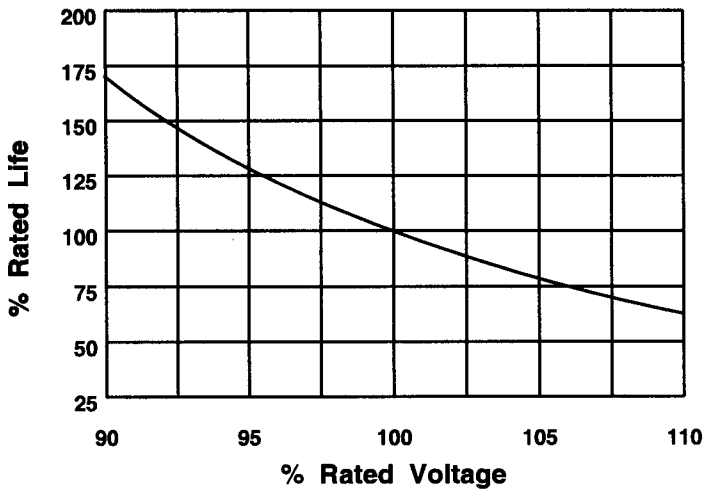
LIFE

The capacitors are designed to provide a minimum of 60,000 hours life with a 90% 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.

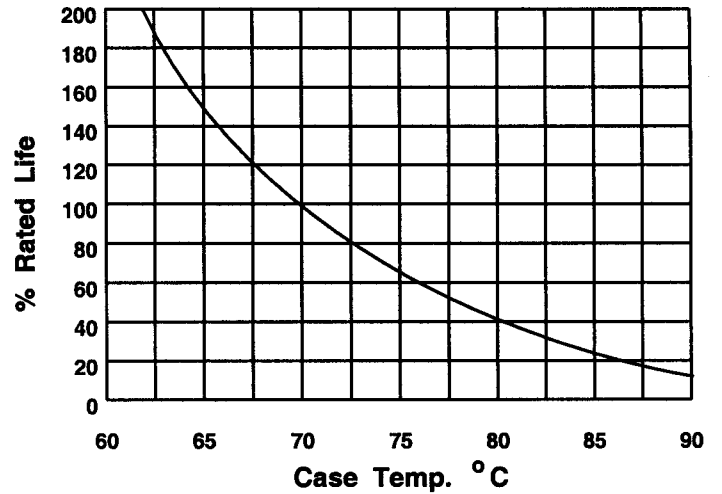


CASE STYLE	'A'	'B'	FOR 1000V-4000V FIG. NO.
A	1.31	2.16	2
C	1.91	2.91	2
D	1.97	3.66	2
E	2.84	4.56	3

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 single deep cups for 1000 V - 4000 V.
 Internal discharge resistor for 1000 V - 4000 V.

Also available with-
 Aluminum case and tinplated steel cover.
 Color coded for capacitance ranges.
 Corrosion resistant gray paint for outdoor use.
 Terminals with two 1/4" wide quick-connect blades and one fork solder-lug.

MF ± 6%	1000 VAC			1250 VAC			1500 VAC		
	CATALOG NO.	CASE STYLE	CASE HT.	CATALOG NO.	CASE STYLE	CASE HT.	CATALOG NO.	CASE STYLE	CASE HT.
.5	USE 1250 V			81A35504H14	A	2.63	81A37504H14	A	3.13
1				81A35105H14	A	3.13	81A37105H14	A	3.50
1.5	81A33155H14	A	3.13	81A35155H14	A	3.88	81C37155H14	C	3.13
2	81A33205H14	A	3.88	81C35205H14	C	3.13	81C37205H14	C	3.50
2.5	81A33255H14	A	4.25	81C35255H14	C	3.50	81C37255H14	C	3.88
3	81C33305H14	C	3.13	81C35305H14	C	3.88	81D37305H14	D	3.88
3.5	81C33355H14	C	3.50	81D35355H14	D	3.50	81D37355H14	D	4.75
4	81C33405H14	C	3.50	81D35405H14	D	4.25	81D37405H14	D	4.75
4.5	81D33455H14	D	3.50	81D35455H14	D	4.25	81D37455H14	D	5.25
5	81D33505H14	D	3.50	81D35505H14	D	4.25	81D37505H14	D	6.25
6	81D33605H14	D	4.25	81D35605H14	D	5.25	81D37605H14	D	6.75
7	81D33705H14	D	4.75	81D35705H14	D	5.75	81D37705H14	D	7.25
8	81D33805H14	D	4.75	81D35805H14	D	5.75	81D37805H14	D	8.00
9	81D33905H14	D	5.25	81D35905H14	D	6.75	81D37905H14	D	9.00
10	81D33106H14	D	5.75	81D35106H14	D	7.25	81D37106H14	D	9.00
11	81D33116H14	D	6.25	81D35116H14	D	8.00	81D37116H14	D	9.88
12	81D33126H14	D	6.75	81D35126H14	D	9.00	81E37126H14	E	6.25
13	81D33136H14	D	6.75	81D35136H14	D	9.00	81E37136H14	E	6.75
14	81D33146H14	D	7.25	81D35145H14	D	9.88	81E37146H14	E	7.25
15	81D33156H14	D	8.00	81D35156H14	D	9.88	81E37156H14	E	8.00
	1750 VAC								
.5	81A39504H14	A	3.88						
1	81C39105H14	C	3.50						
1.5	81D39155H14	D	3.88						
2	81D39205H14	D	4.75						
2.5	81D39255H14	D	5.25						
3	81D39305H14	D	6.25						
3.5	81D39355H14	D	6.75						
4	81D39405H14	D	7.25						
4.5	81D39455H14	D	8.00						
5	81D39505H14	D	9.00						
6	81D39605H14	D	9.88						
7	81E39705H14	E	7.25						
8	81E39805H14	E	8.00						
9	81E39905H14	E	9.00						
10	81E39106H14	E	9.50						
11									
12									
13									
14									
15									

Consult factory for rating and sizes not listed.

MF ± 6%	2000 VAC			2250 VAC			2500 VAC		
	CATALOG NO.	CASE STYLE	CASE HT.	CATALOG NO.	CASE STYLE	CASE HT.	CATALOG NO.	CASE STYLE	CASE HT.
.5	81A40504H14	A	4.25	81A41504H14	A	4.75	81C42504H14	C	3.13
.8	81C40804H14	C	3.50	81C41804H14	C	3.50	81D42804H14	D	3.88
1	81D40105H14	D	3.50	81D41105H14	D	3.50	81D42105H14	D	3.88
1.25	81D40135H50	D	3.50	81D41135H50	D	3.88	81D42135H50	D	4.75
1.5	81D40155H14	D	3.88	81D41155H14	D	4.25	81D42155H14	D	5.25
1.65	81D40175H50	D	4.25	81D41175H50	D	4.75	81D42175H50	D	6.25
1.75	81D40185H50	D	4.25	81D41185H50	D	4.75	81D42185H50	D	6.25
2	81D40205H14	D	4.75	81D41205H14	D	4.75	81D42205H14	D	6.25
2.25	81D40235H50	D	5.25	81D41235H50	D	5.75	81D42235H50	D	6.25
2.5	81D40255H14	D	5.75	81D41255H14	D	5.75	81D42255H14	D	7.25
2.75	81D40285H50	D	6.25	81D41285H50	D	6.75	81D42285H50	D	8.00
3	81D40305H14	D	6.25	81D41305H14	D	6.75	81D42305H14	D	9.00
3.25	81D40335H50	D	7.25	81D41335H50	D	7.25	81D42335H50	D	9.00
3.5	81D40355H14	D	7.25	81D41355H14	D	8.00	81D42355H14	D	9.88
4	81D40405H14	D	8.00	81D41405H14	D	9.00	81E42405H14	E	6.25
4.5	81D40455H14	D	9.00	81D41455H14	D	9.00	81E42455H14	E	7.25
5	81D40505H14	D	9.88	81E41505H14	E	6.25	81E42505H14	E	8.00
6	81E40605H14	E	7.25	81E41605H14	E	7.25	81E42605H14	E	9.00
7	81E40705H14	E	8.00	81E41705H14	E	8.00			
8	81E40805H14	E	9.00	81E41805H14	E	9.50			
	3000 VAC			3500 VAC			4000 VAC		
.5	81D44504H14	D	3.88	81D46504H14	D	3.88	81D48504H14	D	4.25
.8	81D44804H14	D	4.75	81D46804H14	D	4.75	81D48804H14	D	6.25
1	81D44105H14	D	5.25	81D46105H14	D	5.75	81D48105H14	D	7.25
1.25	81D44135H50	D	6.25	81D46135H50	D	7.25	81D48135H50	D	9.00
1.35	81D44145H50	D	6.25	81D46145H50	D	7.25	81D48145H50	D	9.88
1.5	81D44155H14	D	6.75	81D46155H14	D	8.00	81D48155H14	D	9.88
1.65	81D44175H50	D	6.75	81D46175H50	D	9.00	81E48175H50	E	7.25
1.75	81D44185H50	D	7.25	81D46185H50	D	9.00	81E48185H50	E	8.00
2	81D44205H14	D	8.00	81D46205H14	D	9.88	81E48205H14	E	8.00
2.25	81D44235H50	D	9.00	81E46235H50	E	7.25	81E48235H50	E	9.00
2.5	81D44255H14	D	9.00	81E46255H14	E	8.00			
2.75	81D44285H50	D	9.88	81E46285H50	E	8.00			
3	81D44305H14	D	9.88	81E46305H14	E	9.00			
3.5	81E44355H14	E	7.25						
4	81E44405H14	E	8.00						
4.5	81E44455H14	E	9.00						

Consult factory for rating and sizes not listed.