



# Radial Lead Aluminum Electrolytic Capacitors

+125°C Long Life



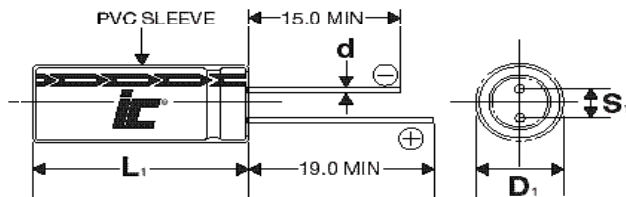
## FEATURES

Small Size - High Voltage - General Purpose

## APPLICATIONS

Inverters – DC Link – AC/DC Motor Controls – Solar Inverters

<b>Operating Temperature Range</b>		<b>-40°C to +125°C</b> <b>-25°C to +125°C</b>								
<b>Capacitance Tolerance</b>		<b>+20% at 120 Hz, 20°C</b>								
<b>Surge Voltage</b>	<b>WVDC</b>	<b>10</b>	<b>16</b>	<b>25</b>	<b>35</b>	<b>50</b>	<b>63</b>	<b>160-250</b>	<b>350-450</b>	
	<b>SVDC</b>	13	20	32	44	63	79	200-300	400-500	
<b>Dissipation Factor</b>	<b>WVDC</b>	<b>10</b>	<b>16</b>	<b>25</b>	<b>35</b>	<b>50</b>	<b>63</b>	<b>160-250</b>	<b>350-450</b>	
	<b>Tan δ</b>	0.19	0.16	0.14	0.12	0.14	0.14	0.20	0.24	
Add .02 for every 1000uF above 1000uF										
<b>Leakage Current</b>		<b>10 to 450 WVDC</b>								
		<b>1 Minutes</b> .03CV or 4uA, Whichever is greater			<b>2 Minutes</b> .01CV or 3uA, Whichever is greater					
<b>Low Temperature Stability Impedance Ratio (120 Hz)</b>	<b>WVDC</b>	<b>10</b>	<b>16</b>	<b>25</b>	<b>35</b>	<b>50</b>	<b>63</b>	<b>160-250</b>	<b>350-450</b>	
	<b>-25°C to +20°C</b>	3	2	2	2	2	2	3	6	
	<b>-40°C to +20°C</b>	6	4	4	4	4	3	-	-	
<b>2000-5000 hours at 125°C with rated 10-63WVDC and ripple current applied</b>										
<b>Load Life</b>		<b>8(D) = 2000hrs</b>			<b>10(D) = 3000hrs</b>			<b>≥13(D) = 5000hrs</b>		
		<b>Capacitance Change</b>		≤30% of initial measured value						
		<b>Dissipation Factor</b>		≤300% of maximum specified value						
<b>Leakage Current</b>		≤100% of maximum specified value								
<b>2000 hours at 125°C with rated 160-450WVDC and ripple current applied</b>										
<b>Capacitance Change</b>		≤20% of initial measured value								
<b>Dissipation Factor</b>		≤200% of maximum specified value								
<b>Leakage Current</b>		≤100% of maximum specified value								
<b>1000 hours at 125°C with no voltage applied 10-63WVDC</b>										
<b>Capacitance Change</b>		≤30% of initial measured value								
<b>Dissipation Factor</b>		≤300% of maximum specified value								
<b>Leakage Current</b>		≤500% of maximum specified value								
<b>1000 hours at 125°C with no voltage applied 160-450WVDC</b>										
<b>Capacitance Change</b>		≤20% of initial measured value								
<b>Dissipation Factor</b>		≤200% of maximum specified value								
<b>Leakage Current</b>		≤500% of maximum specified value								
<b>Ripple Current Multipliers</b>		<b>Frequency (Hz)</b>								
		<b>WVDC</b>	<b>Cap</b>	<b>120</b>	<b>1k</b>	<b>10k</b>	<b>50k-100k</b>			
		<b>10 to 63V</b>	<b>CAP≤10</b>	0.40	0.75	0.90	1.00			
			<b>10&lt;CAP≤100</b>	0.50	0.85	0.95	1.00			
			<b>100&lt;CAP≤1000</b>	0.60	0.88	0.96	1.00			
<b>160 to 450V</b>	<b>1000&lt;CAP</b>	0.75	0.90	0.98	1.00					
	<b>CAP≤33</b>	1.00	1.50	1.75	1.80					
	<b>CAP≥47</b>	1.00	1.30	1.40	1.50					



<b>D</b>	<b>8</b>	<b>10</b>	<b>13</b>	<b>16</b>	<b>18</b>
<b>S</b>	3.5	5.0	5.0	7.5	7.5
<b>d</b>	0.6	0.6	0.6	0.8	0.8

L<sub>1</sub>=L+2.0 mm Max.  
D<sub>1</sub>=D+0.5mm Max.  
S<sub>1</sub>=S+0.5 mm

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# HJR

+125°C, High Temperature,  
2000 hours

WVDC	Capacitance (µF)	IC PART NUMBER	Maximum ESR (Ω) 120 Hz, +20°C	Maximum RMS Ripple Current (mA) 120 Hz, +125°C	Dims DxL (mm)
10	220	HJR227M010	1.4318	340	8x11
10	330	HJR337M010	0.9545	500	10x12.5
10	470	HJR477M010	0.6702	630	10x16
10	1000	HJR108M010	0.315	770	10x20
10	2200	HJR228M010	0.1432	1250	13x25
10	3300	HJR338M010	0.0955	1380	16x25
10	4700	HJR478M010	0.067	1450	16x32
16	220	HJR227M016	1.2057	340	8x11
16	330	HJR337M016	0.8038	500	10x12.5
16	470	HJR477M016	0.5644	770	10x20
16	1000	HJR108M016	0.2653	920	13x20
16	2200	HJR228M016	0.1206	1380	16x25
16	3300	HJR338M016	0.0804	1450	16x32
16	4700	HJR478M016	0.0564	1720	18x32
25	100	HJR107M025	2.321	340	8x11
25	220	HJR227M025	1.055	500	10x12.5
25	330	HJR337M025	0.7033	630	10x16
25	470	HJR477M025	0.4938	770	10x20
25	1000	HJR108M025	0.2321	1250	13x25
25	2200	HJR228M025	0.1055	1450	16x32
35	100	HJR107M035	1.9894	340	10x12.5
35	220	HJR227M035	0.9043	500	10x16
35	330	HJR337M035	0.6029	770	10x20
35	470	HJR477M035	0.4233	920	13x20
35	1000	HJR108M035	0.1989	1380	16x25
50	47	HJR476M050	4.9383	245	8x11
50	100	HJR107M050	2.321	415	10x12.5
50	220	HJR227M050	1.055	491	10x20
50	330	HJR337M050	0.7033	665	13x20
50	470	HJR477M050	0.4938	995	13x25
50	1000	HJR108M050	0.2321	1280	16x32
63	47	HJR476M063	4.9383	245	8x11
63	100	HJR107M063	2.321	455	10x15
63	220	HJR227M063	1.055	665	13x20
63	330	HJR337M063	0.7033	995	13x25
63	470	HJR477M063	0.4938	1000	16x25
160	3.3	HJR335M160	100.477	28	8x11
160	4.7	HJR475M160	70.5475	40	10x12.5
160	10	HJR106M160	33.1573	60	10x16
160	22	HJR226M160	15.0715	115	10x16
160	33	HJR336M160	10.0477	154	10x20
160	47	HJR476M160	7.0547	187	13x20

WVDC	Capacitance (µF)	IC PART NUMBER	Maximum ESR (Ω) 120 Hz, +20°C	Maximum RMS Ripple Current (mA) 120 Hz, +125°C	Dims DxL (mm)
160	68	HJR686M160	4.8761	245	13x25
160	100	HJR107M160	3.3157	329	16x25
160	150	HJR157M160	2.2105	434	16x32
200	3.3	HJR335M200	100.477	28	8x11
200	4.7	HJR475M200	70.5475	40	8x11
200	10	HJR106M200	33.1573	78	10x12.5
200	22	HJR226M200	15.0715	126	10x16
200	33	HJR336M200	10.0477	157	13x20
200	47	HJR476M200	7.0547	204	13x25
200	68	HJR686M200	4.8761	250	16x20
200	100	HJR107M200	3.3157	329	16x25
250	2.2	HJR225M250	150.715	28	8x11
250	3.3	HJR335M250	100.477	32	10x12.5
250	4.7	HJR475M250	70.5475	45	10x16
250	10	HJR106M250	33.1573	78	10x20
250	22	HJR226M250	15.0715	128	13x20
250	33	HJR336M250	10.0477	171	13x25
250	47	HJR476M250	7.0547	225	16x25
250	68	HJR686M250	4.8761	292	16x32
350	1	HJR105M350	397.888	25	8x11
350	2.2	HJR225M350	180.858	32	8x12
350	3.3	HJR335M350	120.572	45	10x12.5
350	4.7	HJR475M350	84.657	53	10x16
350	10	HJR106M350	39.7888	85	10x16
350	22	HJR226M350	18.0858	139	13x25
350	33	HJR336M350	12.0572	189	16x25
350	47	HJR476M350	8.4657	243	16x32
400	1	HJR105M400	397.888	28	10x12.5
400	2.2	HJR225M400	180.858	35	8x11
400	3.3	HJR335M400	120.572	42	8x16
400	4.7	HJR475M400	84.657	53	10x20
400	10	HJR106M400	39.7888	86	10x20
400	22	HJR226M400	18.0858	142	13x30
400	33	HJR336M400	12.0572	189	16x25
400	47	HJR476M400	8.4657	243	16x32
450	1	HJR105M450	397.888	25	8x11
450	2.2	HJR225M450	180.858	32	8x15
450	3.3	HJR335M450	120.572	40	10x16
450	4.7	HJR475M450	84.657	58	10x16
450	10	HJR106M450	39.7888	86	13x20
450	22	HJR226M450	18.0858	154	16x25
450	33	HJR336M450	12.0572	203	16x32