

# LCA

## + 85°C Low Leakage Current Aluminum Electrolytic Capacitors



### FEATURES

- Wide Capacitance Range (.1 to 100  $\mu$ F)
- Standard Case Sizes
- Operating Voltage Range: 6.3 WVDC to 50 WVDC

### SPECIFICATIONS

<b>Capacitance Tolerance</b>		<b><math>\pm 20\%</math> at 120Hz, 20°C</b>									
<b>Operating Temperature Range</b>		<b>-40°C to +85°C</b>									
<b>Dissipation Factor 120Hz, 20°C (Max) <math>\tan \delta</math></b>	<b>WVDC</b>	6.3	10	16	25	35	50				
	<b><math>\tan \delta</math></b>	.24	.20	.16	.14	.12	.1				
<b>Leakage current</b>	<b>Time</b>	2 minutes									
		.002 CV or .5 $\mu$ A, whichever is greater									
<b>Impedance Ratio at Low Temperature (120Hz)</b>	<b>-25°C/20°C</b>	4	3	2	2	2	2				
	<b>-40°C/20°C</b>	8	6	4	4	3	3				
<b>Load Life</b>	<b>2,000 hours at 85°C with rated voltage</b>										
	Capacitance change Dissipation factor Leakage current	$\leq 25\%$ of initial measured values $\leq 200\%$ initial specified value $\leq 100\%$ Initial specified value									
<b>Shelf Life</b>	<b>1000 hours at 85°C with no applied voltage.</b>										
	Capacitance change Dissipation factor Leakage current	$\leq 20\%$ of initial measured values $\leq$ Initial specified value $\leq$ Initial specified value									
<b>Resistance to Soldering Heat</b>	Capacitors placed on a 250°C hot plate for 30 seconds with their electrode terminals facing downward will fulfill the following conditions after being cooled to room temperature.										
<b>Ripple Current Multipliers</b>	<b>Frequency (Hz)</b>					<b>Temperature (°C)</b>					
	50	120	400	1K	10K	100K	85°C	70°C			65°C
	.8	1.0	1.0	1.1	1.3	1.5	1.0	1.35			1.35

## STANDARD PARTS LISTING

Capacitance (μF)	WVDC	ic <sup>®</sup> PART NUMBER	Maximum E.S.R. Ω 120Hz, +20°C	Maximum RMS Ripple Current (mA) at 120 Hz, +85°C	Dimensions DxL (mm)
0.1	50	104LCA050M	1657.864	1	4x5.4
0.22	50	224LCA050M	753.575	2.3	4x5.4
0.33	50	334LCA050M	502.383	3.5	4x5.4
0.47	50	474LCA050M	352.737	5	4x5.4
1	50	105LCA050M	165.786	10	4x5.4
2.2	50	225LCA050M	75.357	15	4x5.4
3.3	50	335LCA050M	50.238	18	4x5.4
4.7	35	475LCA035M	42.328	20	4x5.4
4.7	50	475LCA050M	35.274	23	5x5.4
10	16	106LCA016M	26.526	25	4x5.4

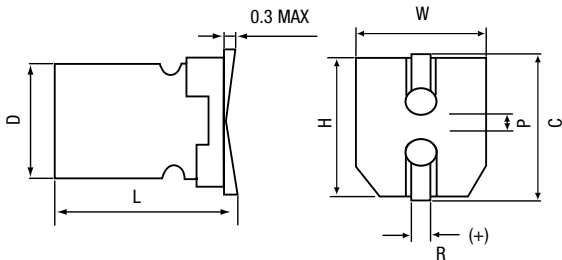
Capacitance (μF)	WVDC	ic <sup>®</sup> PART NUMBER	Maximum E.S.R. Ω 120Hz, +20°C	Maximum RMS Ripple Current (mA) at 120 Hz, +85°C	Dimensions DxL (mm)
10	35	106LCA035M	19.894	30	5x5.4
10	50	106LCA050M	16.579	34	6.3x5.4
22	6.3	226LCA6R3M	18.086	31	4x5.4
22	16	226LCA016M	12.057	39	5x5.4
22	35	226LCA035M	9.043	54	6.3x5.4
33	10	336LCA010M	10.048	43	5x5.4
33	25	336LCA025M	7.033	63	6.3x5.4
47	6.3	476LCA6R3M	8.466	47	5x5.4
47	16	476LCA016M	5.644	68	6.3x5.4
100	10	107LCA010M	3.316	76	6.3x5.4

## PHYSICAL DIMENSIONS

WVDC (V) / (μF)	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)
0.1						4x5.4
0.22						4x5.4
0.33						4x5.4
0.47						4x5.4
1						4x5.4
2.2						4x5.4
3.3						4x5.4
4.7					4x5.4	5x5.4
10			4x5.4		5x5.4	6.3x5.4
22	4x5.4		5x5.4		6.3x5.4	
33		4x5.4		5x5.4		
47	5x5.4		6.3x5.4			
100		6.3x5.4				

DxL (mm)

## DIMENSIONS



D <sub>+0.5 MAX</sub>	L <sub>±0.1, ±0.2</sub>	W <sub>±0.2</sub>	H <sub>±0.3</sub>	C <sub>±0.3</sub>	R	P <sub>±0.2</sub>
4	5.4	4.3	4.3	5.0	0.5~0.8	1.0
5	5.4	5.3	5.3	6.0	0.5~0.8	1.5
6.3	5.4	6.6	6.6	7.3	0.5~0.8	2.1

(mm)