



# Aluminum Polymer Capacitors

+105°C Very Low ESR



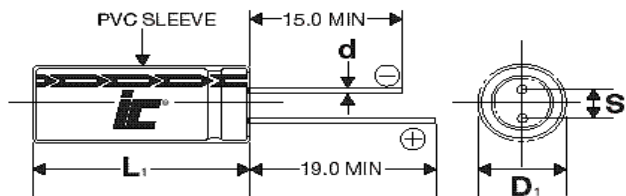
## FEATURES

Small Size - High Ripple Current - Super Low ESR

## APPLICATIONS

DC-DC Converters - Voltage Regulators - Motherboards  
- De-Coupling

<b>Operating Temperature Range</b>		<b>-55°C to +105°C</b>			
<b>Capacitance Tolerance</b>		<b>+20% at 120 Hz, 20°C</b>			
<b>Surge Voltage</b>	<b>WVDC</b>	<b>16</b>	<b>20</b>	<b>25</b>	<b>35</b>
	<b>SVDC</b>	1.15*WVDC			
<b>Dissipation Factor</b>	<b>WVDC</b>	<b>16</b>	<b>20</b>	<b>25</b>	<b>35</b>
	<b>Tan δ</b>	.12 MAX @120 Hz, 20°C			
<b>Leakage Current</b>		<b>2 Minutes</b>			
		0.2CV or 280uA, Whichever is greater			
<b>Low Temperature Stability Impedance Ratio (100 kHz)</b>	<b>-55°C/ +20°C</b>	≤1.25			
	<b>+105°C/ +20°C</b>	≤1.25			
<b>Load Life</b>		<b>2000 hours at 105°C with rated WVDC and ripple current applied</b>			
		<b>Capacitance Change</b>	≤20% of initial measured value		
		<b>Dissipation Factor</b>	≤150% of maximum specified value		
		<b>ESR</b>	≤150% of maximum specified value		
		<b>Leakage Current</b>	≤100% of maximum specified value		
<b>Surge Voltage Life</b>		<b>1000 cycles at 20°C with rated surge voltage applied for 30 seconds through a 1kΩ resistor and discharged for 5 minutes and 30 seconds</b>			
		<b>Capacitance Change</b>	≤20% initial measured value		
		<b>Dissipation Factor</b>	≤150% of maximum specified value		
		<b>ESR</b>	≤150% of maximum specified value		
		<b>Leakage Current</b>	≤100% of maximum specified value		
<b>Damp Heat Test</b>		<b>1000 hours at 60°C and 90 to 95% RH with no voltage applied</b>			
		<b>Capacitance Change</b>	≤20% initial measured value		
		<b>Dissipation Factor</b>	≤150% of maximum specified value		
		<b>ESR</b>	≤150% of maximum specified value		
		<b>Leakage Current</b>	≤100% of maximum specified value		
<b>Ripple Current Multipliers</b>		<b>Frequency (Hz)</b>			
		<b>120 Hz ≤ f &lt; 1 kHz</b>	<b>1 kHz ≤ f &lt; 10 kHz</b>	<b>10 kHz ≤ f &lt; 100 kHz</b>	<b>100 kHz ≤ f &lt; 500 kHz</b>
		<b>0.05</b>	<b>0.3</b>	<b>0.7</b>	<b>1.0</b>



DxL	6.3x8	8x8	8x11.5	10x12.5
<b>S</b>	2.5	3.5	3.5	3.0
<b>d</b>	0.6	0.6	0.6	0.6

L<sub>1</sub> = L + 1.0 mm Max. (D ≤ 8mm)  
 L<sub>1</sub> = L + 1.5 mm Max. (D > 8mm)  
 D<sub>1</sub> = D + 0.5 mm Max.  
 S<sub>1</sub> = S + 0.5 mm



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# ULG

+105°C Standard Low ESR

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR (Ω) 120 Hz, +20°C	Maximum ESR (mΩ) 100 kHz, +20°C	Leakage Current (µA)	Maximum RMS Ripple Current (mA) 100 kHz, +105°C	Dims DxL (mm)
22	25	226ULG025MEF	9.04	55	280	1700	6.3x8
33	20	336ULG020MEF	6.03	45	280	1880	6.3x8
33	25	336ULG025MFF	6.03	50	280	1870	8x8
47	20	476ULG020MFF	4.23	42	280	1952	8x8
47	25	476ULG025MFF	4.23	45	280	1940	8x8
47	35	476ULG035MFF	4.23	90	329	1500	8x6
100	20	107ULG020MFH	1.99	34	400	2670	8x11.5
100	25	107ULG025MFH	1.99	40	500	2500	8x11.5
100	35	107ULG035MGU	1.99	65	700	1870	10x12.5
150	20	157ULG020MGU	1.33	35	600	2672	10x12.5
180	16	187ULG016MFH	1.11	16	576	4360	8x11.5
220	25	227ULG025MGU	0.9	35	1100	3100	10x12.5
220	35	227ULG035MGU	0.9	55	1540	2450	10x12.5
330	16	337ULG016MGU	0.6	14	1056	5050	10x12.5
330	35	337ULG035MGU	0.6	45	2310	2700	10x12.5