



# Aluminum Polymer Capacitors

+105°C Very Low ESR



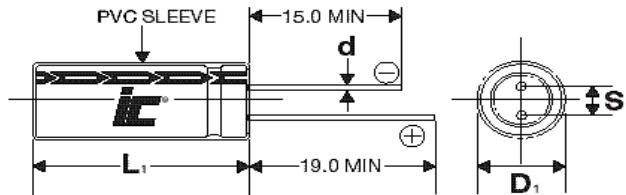
## FEATURES

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; 1kHz</b>	<b>1 kHz ≤ f &lt; 10 kHz</b>	<b>10 kHz ≤ f &lt; 100kHz</b>	<b>100 kHz ≤ f &lt; 500kHz</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
S	2.5	3.5	3.5	3.0
d	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+0.5mm Max.  
S<sub>1</sub>=S+0.5 mm



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### North America

Tel: 847.675.1760

sales@illcap.com

### Asia

Tel: 852.2793 0931

sales@illcap.com.hk

# ULG

**+105°C Super Low ESR Radial  
lead aluminum polymer  
capacitors**

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