

# UER

## Aluminum Polymer Capacitors

5,000 Hour



### FEATURES

High Temperature – Very Low ESR – High Ripple Current – Stable with Temperature – High Frequency

### APPLICATIONS

DC-DC Converters – Voltage Regulators – Decoupling

<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>2.5</b>	<b>4</b>	<b>10</b>	<b>16</b>
	<b>SVDC</b>	1.15 x rated WVDC			
<b>Dissipation Factor 120 Hz, 20°C</b>		<b>10% MAX</b>			
<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>5000 hours at 105°C with rated WVDC 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>Damp Heat test</b>		<b>1000 hours at 60°C with rated voltage applied at 90-95% R.H.</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 test</b>		<b>1000 cycles at 105°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% 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>Ripple Current Multipliers</b>		<b>Frequency (Hz)</b>			
		<b>120Hz≤f&lt;1kHz</b>	<b>1kHz≤f&lt;10kHz</b>	<b>10kHz≤f&lt;100kHz</b>	<b>100kHz≤f&lt;500kHz</b>
		0.05	0.3	0.7	1.0



D+0.5	5	6.3	8	10
S±0.5	2	2.5	3.5	5.0
d	0.5 L≤7mm 0.6 (L>7mm)	0.45 L≤6mm 0.6 (L>6mm)	0.6	0.6

L<sub>1</sub>=L+1.0 mm MAX L<11mm  
L<sub>1</sub>=L+1.5 mm MAX, L≥11 mm

# UER

+105°C 5000 hour Low ESR

WVDC	Capacitance (µF)	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)
2.5	470	477UER2R5MEF	0.35	10	280	4500	6.3x8
2.5	820	827UER2R5MEF	0.2	7	410	5600	6.3x8
2.5	820	827UER2R5MFF	0.2	7	410	5600	8x8
4	560	567UER4R0MEF	0.3	7	448	4500	6.3x8
6.3	100	107UER6R3MEW	1.66	30	280	2580	6.3x6
6.3	470	477UER6R3MEF	0.35	10	592	4500	6.3x8
6.3	470	477UER6R3MFF	0.35	8	592	4000	8x8
6.3	560	567UER6R3MEF	0.3	8	706	4700	6.3x8
6.3	560	567UER6R3MFF	0.3	8	706	4800	8x8
10	1200	128UER010MGU	0.14	8	2400	5000	10x12.5
16	100	107UER016MED	1.66	24	320	2490	6.3x5
16	100	107UER016MES	1.66	24	320	2490	6.3x7
16	100	107UER016MEF	1.66	24	320	2820	6.3x8
16	220	227UER016MFH	0.75	15	704	4300	8x11.5
16	270	277UER016MFF	0.61	12	864	5000	8x8
16	270	277UER016MFH	0.61	10	864	5000	8x11.5
16	330	337UER016MFH	0.5	10	1056	5000	8x11.5
16	470	477UER016MFH	0.35	11	1504	5400	8x11.5
16	470	477UER016MGU	0.35	10	1504	5600	10x12.5
16	1000	108UER016MGU	0.17	11	3200	5600	10x12.5