

# AXZ

## +105°C Low Impedance Surface Mount Chip Aluminum Electrolytic Capacitors



### FEATURES

- Wide Capacitance Range 1.0 to 1,500  $\mu\text{F}$
- Solvent Proof
- Low Impedance
- Operating Voltage Range: 6.3WVDC to 50WVDC
- Extended Life

### SPECIFICATIONS

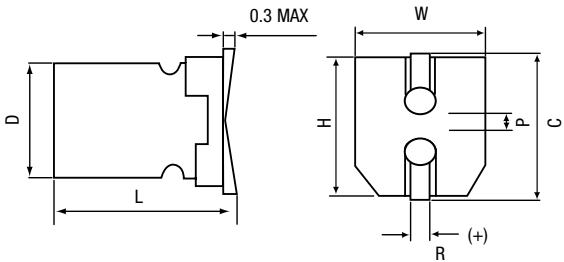
Capacitance Tolerance	$\pm 20\%$ at 120Hz, 20°C						
Operating Temperature Range	-55°C to +105°C						
Dissipation Factor 120Hz, 20°C (Max) $\tan \delta$	WVDC	6.3	10	16	25	35	50
	D=4-6.3	.24	.20	.16	.14	.12	.12
	D=8,10	.28	.24	.20	.16	.14	.14
	Note: For above D.F. specifications, add .02 for every 1000 $\mu\text{F}$ above 1000 $\mu\text{F}$						
Leakage current	Time	2 minutes					
	L.C.	.01 CV or 3 $\mu\text{A}$ , whichever is greater					
Impedance Ratio at Low Temperature (120Hz)	-25°C/20°C	3	2	2	2	2	2
	-40°C/20°C	5	4	4	3	3	3
Load Life	2,000 hours at 105°C with rated voltage (D $\leq$ 6.3, 1000hrs.)						
	Capacitance change Dissipation factor Leakage current	$\leq 25\%$ of initial measured values $\leq 200\%$ initial specified value $\leq 100\%$ Initial specified value					
Shelf Life	1000 hours at 105°C with no applied voltage.						
Resistance to Soldering Heat	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.						
	Capacitance change Dissipation factor Leakage current	$\leq 10\%$ of the initial measured value $\leq$ The initial specified value $\leq$ The Initial specified value					
Ripple Current Multipliers	Frequency(Hz)				Temperature(°C)		
	60	120	1k	10k	6.5	85	105
	.45	.5	83	1.0	.45	1.7	1.0

## PHYSICAL DIMENSIONS

WVDC (SV) (μF)	6.3 (7.9)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)
1						4x5.8
2.2						4x5.8
3.3						4x5.8
4.7					4x5.8	5x5.8
6.8						5x5.8
10				4x5.8	5x5.8	6.3x5.8
15			4x5.8		5x5.8	6.3x5.8
22		4x5.8			5x5.8	6.3x5.8
27	4x5.8		5x5.8		6.3x5.8	6.3x7.7
33		5x5.8			6.3x5.8	6.3x7.7
47	5x5.8				6.3x5.8	6.3x7.7
56	5x5.8			6.3x5.8	6.3x7.7	8x10.2
68				6.3x5.8	6.3x7.7	8x10.2
100			6.3x5.8	6.3x7.7		8x10.2
150		6.3x5.8	6.3x7.7		8x10.2	10x10.2
220	6.3x5.8		6.3x7.7		8x10.2	10x10.2
330	6.3x7.7		10x7.7	8x10.2	10x10.2	
470			8x10.2	10x10.2		
680	8x10.2		10x10.2			
1000	8x10.2	10x10.2				
1500	10x10.2					

DxL (mm)

## DIMENSIONS



D+0.5 MAX	L	W±0.2	H±0.2	C±0.2	R	P±0.2
4	5.8 +0.1/-0.2	4.3	4.3	5.0	0.5~0.8	1.0
5	5.8 +0.1/-0.2	5.3	5.3	6.0	0.5~0.8	1.4
6.3	5.8 +0.3 MAX	6.6	6.6	7.3	0.5~0.8	2.2
6.3	7.7 +0.3 MAX	6.6	6.6	7.3	0.5~0.8	2.2
8	10.2 +0.3 MAX	8.3	8.3	9.0	0.7~1.0	3.2
10	10.2 +0.3 MAX	10.3	10.3	11.0	0.7~1.0	4.6

(mm)

**AXZ****+105°C Low Impedance  
Surface Mount  
Chip Aluminum  
Electrolytic Capacitors****STANDARD PART LISTING**

Capacitance (µF)	WVDC	IC <sup>®</sup> PART NUMBER	Maximum ESR Ω 120Hz +20°C	Impedance Ω 100kHz +20°C	Maximum RMS Ripple Current (mA) at 100kHz, +105°C	Dimensions DxL (mm)
1	50	105AXZ050M	198.944	5	30	4x5.8
2.2	50	225AXZ050M	90.429	5	30	4x5.8
3.3	50	335AXZ050M	60.286	5	30	4x5.8
4.7	35	475AXZ035M	42.328	1.8	80	4x5.8
4.7	50	475AXZ050M	42.328	1.52	85	5x5.8
6.8	50	685AXZ050M	29.256	1.2	120	5x5.8
10	25	106AXZ025M	23.210	1.8	80	4x5.8
10	35	106AXZ035M	19.894	.76	150	5x5.8
10	50	106AXZ050M	19.894	.88	165	6.3x5.8
15	16	156AXZ016M	17.684	1.8	80	4x5.8
15	35	156AXZ035M	13.263	.76	150	5x5.8
15	50	156AXZ050M	13.263	.88	165	6.3x5.8
22	10	226AXZ010M	15.071	1.8	80	4x5.8
22	35	226AXZ035M	9.043	.76	150	5x5.8
22	50	226AXZ050M	9.043	.88	165	6.3x5.8
27	6.3	276AXZ6R3M	14.737	1.8	80	4x5.8
27	16	276AXZ016M	9.824	.76	150	5x5.8
27	35	276AXZ035M	7.368	.44	230	6.3x5.8
27	50	276AXZ050M	7.368	.68	185	6.3x7.7
33	10	336AXZ010M	10.048	.76	150	5x5.8
33	35	336AXZ035M	6.029	.44	230	6.3x5.8
33	50	336AXZ050M	6.029	.68	185	6.3x7.7
47	6.3	476AXZ6R3M	8.466	.76	150	5x5.8
47	35	476AXZ035M	4.233	.44	230	6.3x5.8
47	50	476AXZ050M	4.233	.68	185	6.3x7.7
56	6.3	566AXZ6R3M	7.105	.76	150	5x5.8
56	25	566AXZ025M	4.145	.44	230	6.3x5.8

Capacitance (µF)	WVDC	IC <sup>®</sup> PART NUMBER	Maximum ESR Ω 120Hz +20°C	Impedance Ω 100kHz +20°C	Maximum RMS Ripple Current (mA) at 100kHz, +105°C	Dimensions DxL (mm)
56	35	566AXZ035M	3.553	.34	280	6.3x7.7
56	50	566AXZ050M	4.145	.34	300	8x10.2
68	25	686AXZ025M	3.413	.44	230	6.3x5.8
68	35	686AXZ035M	2.926	.34	280	6.3x7.7
68	50	686AXZ050M	3.413	.34	300	8x10.2
100	16	107AXZ016M	2.653	.44	230	6.3x5.8
100	25	107AXZ025M	2.321	.34	290	6.3x7.7
100	50	107AXZ050M	1.989	.34	300	8x10.2
150	10	157AXZ010M	2.210	.44	230	6.3x5.8
150	16	157AXZ016M	1.768	.34	280	6.3x7.7
150	35	157AXZ035MD8	1.547	.17	450	8x10.2
150	50	157AXZ050M	1.547	.18	670	10x10.2
220	6.3	227AXZ6R3M	1.809	.44	230	6.3x5.8
220	16	227AXZ016M	1.206	.34	280	6.3x7.7
220	35	227AXZ035M	1.055	.17	450	8x10.2
220	50	227AXZ050M	1.055	.18	670	10x10.2
330	6.3	337AXZ6R3M	1.206	.34	280	6.3x7.7
330	16	337AXZ016M	1.005	.17	450	10x7.7
330	25	337AXZ025M	0.804	.17	450	8x10.2
330	35	337AXZ035M	0.703	.09	670	10x10.2
470	16	477AXZ016M	0.705	.17	450	8x10.2
470	25	477AXZ025M	0.564	.09	670	10x10.2
680	6.3	687AXZ6R3MD8	0.683	.17	450	8x10.2
680	16	687AXZ016M	0.488	.09	670	10x10.2
1000	6.3	108AXZ6R3M	0.464	.17	450	8x10.2
1000	10	108AXZ010M	0.398	.09	670	10x10.2
1500	6.3	158AXZ6R3M	0.332	.09	670	10x10.2

**ILLINOIS CAPACITOR, INC.**

3757 W. Touhy Ave., Lincolnwood, IL 60712 • (847) 675-1760 • Fax (847) 673-2850 • www.illcap.com