AKZ Series

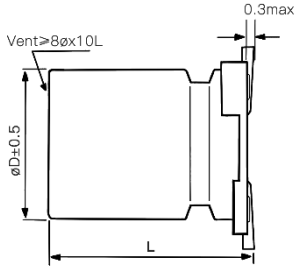
Features

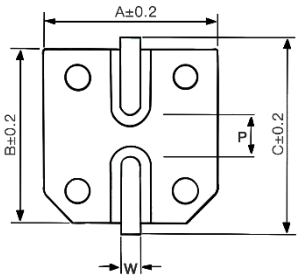
- φ4 ~ φ10, 105℃, 2000 hours assured
- Extra low impedance capacitors (5% ~ 20% lower than AFZ Series)
- Designed for reflow soldering
- Designed for surface mounting on high-density PCB
- Vibration resistant structure
- RoHS 2.0 compliant, 247 REACH&SVHC compliant
- AEC-Q200 compliant, Please contact Jarson for more details, test data, information

Marking color: Black

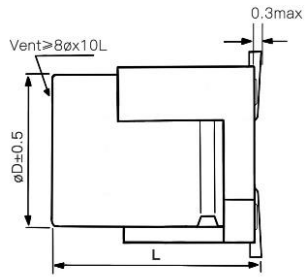
Specifications								
Category temp. range	–55℃ to +105℃							
Capacitance tolerance	±20% (120 Hz / +20 ℃)							
Leakage current	I ≦ 0.01 CV or 3 μA whichever is greater (after 2 minutes)							
Tan δ	Please see the attached characteristics list							
Characteristics at low temperature	Rated voltage (V)	6.3	10	16	25	35	50	Impedance ratio at 120 Hz
	Z(-25 ℃) / Z(+20 ℃)	4	3	2	2	2	2	
	Z(-55 ℃) / Z(+20 ℃)	8	5	4	3	3	3	
Endurance	After applying rated working voltage for 2000 hours at +105 ℃ ± 2 ℃, and then being stabilized at +20 ℃, capacitors shall meet the following limits.							
	Capacitance change	Within ±30% of the initial value						
	Dissipation factor (tan δ)	Less than 300% of the initial value						
	Leakage current	Within the initial limit						
Shelf life	After storage for 1000 h at +105 ℃ ± 2 ℃ with no voltage applied and then being stabilized at +20 ℃, capacitors shall meet the limits specified in endurance.							
Resistance to soldering heat	After reflow soldering and then being stabilized at +20 ℃, capacitors shall meet the following limits.							
	Capacitance change	Within ±10% of the initial value						
	Dissipation factor (tan δ)	Within the initial limit						
	Leakage current	Within the initial limit						
Frequency correction factor for ripple current	Frequency	50Hz		120Hz		1kHz		10kHz≦
	Correction Factor	0.6		0.7		0.85		1.0

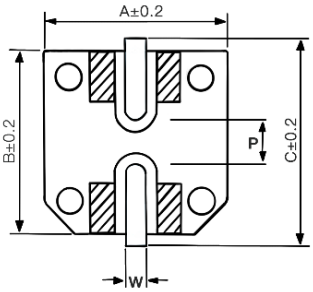
Dimensions:





Vibration resistant structure:

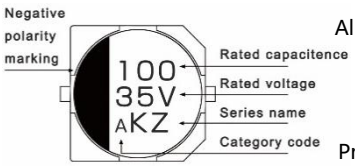




Dimensions						Unit: mm
φD	L	A	B	C	W	P±0.2
4	5.8±0.4	4.3	4.3	5.1	0.5~0.8	1.0
5	5.8±0.4	5.3	5.3	6.0	0.5~0.8	1.4
6.3	5.8±0.4	6.6	6.6	7.3	0.5~0.8	2.0
6.3	7.7±0.4	6.6	6.6	7.3	0.5~0.8	2.0
8	6.5±0.5	8.3	8.3	9.1	0.7~1.3	3.1
8	10.5±0.5	8.3	8.3	9.1	0.7~1.3	3.1
10	10.5±0.5	10.3	10.3	11.1	0.7~1.3	4.4

: Aid electrode

Marking:



Part Number System:

Aluminum E-Caps	KZ series	16V	220μF	±20 %	6.3 φ x7.7L
A	**KZ**	**1C**	**221**	**M**	**0607**
Product category	Series name	Rated voltage	Capacitance	Capacitance tolerance	Case Size

Characteristics list

Rated voltage (V)	Capacitance (±20%) (μF)	Case size		Specification			Part Number④	Taping&Reel
		øD (mm)	L (mm)	Rated ripple current① (mA rms)	Imp.② (Ω)	tan δ③		MPQ (pcs/reel)
6.3	22	4	5.8	90	1.35	0.26	AKZ0J220M0406	2000
	33	4	5.8	90	1.35	0.26	AKZ0J330M0406	2000
	47	5	5.8	160	0.70	0.26	AKZ0J470M0506	1000
	68	6.3	5.8	240	0.36	0.26	AKZ0J680M0606	1000
	100	6.3	5.8	240	0.36	0.26	AKZ0J101M0606	1000
	150	6.3	5.8	240	0.36	0.26	AKZ0J151M0606	1000
	220	6.3	5.8	240	0.36	0.26	AKZ0J221M0606	1000
	330	6.3	7.7	290	0.32	0.26	AKZ0J331M0607	1000
		8	6.5	300	0.26	0.26	AKZ0J331M0806	1000
		8	10.5	600	0.16	0.26	AKZ0J331M0810	500
	470	8	10.5	600	0.16	0.26	AKZ0J471M0810	500
	680	8	10.5	600	0.16	0.26	AKZ0J681M0810	500
	1000	8	10.5	600	0.16	0.26	AKZ0J102M0810	500
	1500	10	10.5	850	0.08	0.26	AKZ0J152M1010	500
10	22	4	5.8	90	1.35	0.19	AKZ1A220M0406	2000
	33	5	5.8	160	0.70	0.19	AKZ1A330M0506	1000
	47	6.3	5.8	240	0.36	0.19	AKZ1A470M0606	1000
	68	6.3	5.8	240	0.36	0.19	AKZ1A680M0606	1000
	100	6.3	5.8	240	0.36	0.19	AKZ1A101M0606	1000
	150	6.3	5.8	240	0.36	0.19	AKZ1A151M0606	1000
	220	6.3	7.7	290	0.32	0.19	AKZ1A221M0607	1000
		8	6.5	300	0.26	0.19	AKZ1A221M0806	1000
	330	8	10.5	600	0.16	0.19	AKZ1A331M0810	500
	470	8	10.5	600	0.16	0.19	AKZ1A471M0810	500
	680	10	10.5	850	0.08	0.19	AKZ1A681M1010	500
	1000	10	10.5	850	0.08	0.19	AKZ1A102M1010	500
16	10	4	5.8	90	1.35	0.16	AKZ1C100M0406	2000
	22	5	5.8	160	0.70	0.16	AKZ1C220M0506	1000
	33	6.3	5.8	240	0.36	0.16	AKZ1C330M0606	1000
	47	6.3	5.8	240	0.36	0.16	AKZ1C470M0606	1000
	68	6.3	5.8	240	0.36	0.16	AKZ1C680M0606	1000
	100	6.3	5.8	240	0.36	0.16	AKZ1C101M0606	1000
	150	6.3	7.7	290	0.32	0.16	AKZ1C151M0607	1000
	220	6.3	7.7	290	0.32	0.16	AKZ1C221M0607	1000
		8	6.5	300	0.26	0.16	AKZ1C221M0806	1000
	330	8	10.5	600	0.16	0.16	AKZ1C331M0810	500
	470	8	10.5	600	0.16	0.16	AKZ1C471M0810	500
		10	10.5	850	0.08	0.16	AKZ1C471M1010	500
	680	10	10.5	850	0.08	0.16	AKZ1C681M1010	500

① Rated ripple current (100kHz / +105℃) ② Impedance (100kHz / +20℃) ③ tan δ (120Hz / +20℃)

④ For automotive，the Part Number is appended with "a" at the end. ⑤ For Vibration resistant structure，the Part Number is appended with "v" at the end.

※Please refer to the page of reflow conditions for reflow profile.

Characteristics list

Rated voltage (V)	Capacitance (±20%) (μF)	Case size		Specification			Part Number④	Taping&Reel
		øD (mm)	L (mm)	Rated ripple current① (mA rms)	Imp.② (Ω)	tan δ③		MPQ (pcs/reel)
25	10	4	5.8	90	1.35	0.14	AKZ1E100M0406	2000
	22	5	5.8	160	0.70	0.14	AKZ1E220M0506	1000
	33	6.3	5.8	240	0.36	0.14	AKZ1E330M0606	1000
	47	6.3	5.8	240	0.36	0.14	AKZ1E470M0606	1000
	68	6.3	5.8	240	0.36	0.14	AKZ1E680M0606	1000
	100	6.3	7.7	290	0.32	0.14	AKZ1E101M0607	1000
		8	6.5	330	0.26	0.14	AKZ1E101M0806	1000
	150	8	10.5	600	0.16	0.14	AKZ1E151M0810	500
	220	8	10.5	600	0.16	0.14	AKZ1E221M0810	500
	330	8	10.5	600	0.16	0.14	AKZ1E331M0810	500
	680	10	10.5	850	0.08	0.14	AKZ1E681M1010	500
35	4.7	4	5.8	90	1.35	0.12	AKZ1V4R7M0406	2000
	10	5	5.8	160	0.70	0.12	AKZ1V100M0506	1000
	22	6.3	5.8	240	0.36	0.12	AKZ1V220M0606	1000
	33	6.3	5.8	240	0.36	0.12	AKZ1V330M0606	1000
	47	6.3	5.8	240	0.36	0.12	AKZ1V470M0606	1000
	68	6.3	7.7	290	0.32	0.12	AKZ1V680M0607	1000
		8	6.5	300	0.26	0.12	AKZ1V680M0806	1000
	100	6.3	7.7	290	0.32	0.12	AKZ1V101M0607	1000
		8	10.5	600	0.16	0.12	AKZ1V101M0810	500
	150	8	10.5	600	0.16	0.12	AKZ1V151M0810	500
	220	10	10.5	850	0.08	0.12	AKZ1V221M1010	500
	330	10	10.5	850	0.08	0.12	AKZ1V331M1010	500
50	150	8	10.5	350	0.34	0.10	AKZ1H151M0810	500
	330	10	10.5	670	0.18	0.10	AKZ1H331M1010	500

① Rated ripple current (100kHz / +105℃) ② Impedance (100kHz / +20℃) ③ tan δ (120Hz / +20℃)

④ For automotive，the Part Number is appended with "a" at the end. ⑤ For Vibration resistant structure，the Part Number is appended with "v" at the end.

※Please refer to the page of reflow conditions for reflow profile.