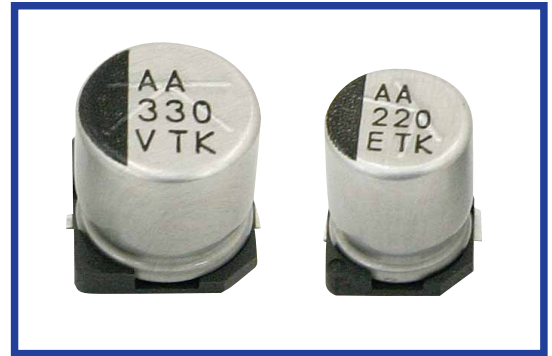


TKV SERIES

105°C Low ESR , Lead Free Reflow Soldering

◆FEATURES

- Load Life 105°C 2000 hours.
- Lead free reflow soldering is available.
- Available for high density mounting.
- Prescribe ESR value at 100 kHz.
- RoHS compliance.



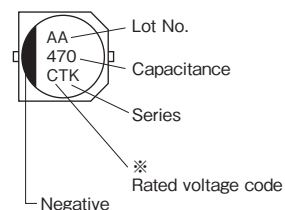
◆SPECIFICATIONS

Items	Characteristics																													
Category Temperature Range	-55~+105℃																													
Rated Voltage Range	6.3~35Vdc																													
Capacitance Tolerance	±20% (20℃,120Hz)																													
Leakage Current(MAX)	I=0.01CV or 3μA whichever is greater. (After 2 minutes application of rated voltage) I=Leakage Current (μA) C=Capacitance (μF) V=Rated Voltage (Vdc)																													
(tanδ) Dissipation Factor(MAX)	<table><tr><td>Rated Voltage (Vdc)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td></tr><tr><td>tanδ</td><td>0.26</td><td>0.19</td><td>0.16</td><td>0.14</td><td>0.12</td></tr></table> (20℃,120Hz)						Rated Voltage (Vdc)	6.3	10	16	25	35	tanδ	0.26	0.19	0.16	0.14	0.12												
Rated Voltage (Vdc)	6.3	10	16	25	35																									
tanδ	0.26	0.19	0.16	0.14	0.12																									
Endurance	After applying rated voltage for 2000 hours at 105℃, the capacitor shall meet the following requirements. <table><tr><td>Capacitance Change</td><td colspan="5">Within ±30% of the initially measured value.</td></tr><tr><td>Dissipation Factor</td><td colspan="5">Not more than 200% of the specified value.</td></tr><tr><td>Leakage Current</td><td colspan="5">Not more than the specified value.</td></tr></table>						Capacitance Change	Within ±30% of the initially measured value.					Dissipation Factor	Not more than 200% of the specified value.					Leakage Current	Not more than the specified value.										
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Leakage Current	Not more than the specified value.																													
Low Temperature Stability Impedance Ratio(MAX)	<table><tr><td>Rated Voltage (Vdc)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td></tr><tr><td>Z(-25℃)/Z(20℃)</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z(-40℃)/Z(20℃)</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td></tr><tr><td>Z(-55℃)/Z(20℃)</td><td>4</td><td>4</td><td>4</td><td>3</td><td>3</td></tr></table> (120Hz)						Rated Voltage (Vdc)	6.3	10	16	25	35	Z(-25℃)/Z(20℃)	2	2	2	2	2	Z(-40℃)/Z(20℃)	3	3	3	3	3	Z(-55℃)/Z(20℃)	4	4	4	3	3
Rated Voltage (Vdc)	6.3	10	16	25	35																									
Z(-25℃)/Z(20℃)	2	2	2	2	2																									
Z(-40℃)/Z(20℃)	3	3	3	3	3																									
Z(-55℃)/Z(20℃)	4	4	4	3	3																									

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)	120	1k	10k	100k≤
33μF	0.42	0.75	0.90	1.00
47~150μF	0.44	0.80	0.95	1.00
220~1800μF	0.60	0.85	0.95	1.00

◆MARKING



※Voltage code

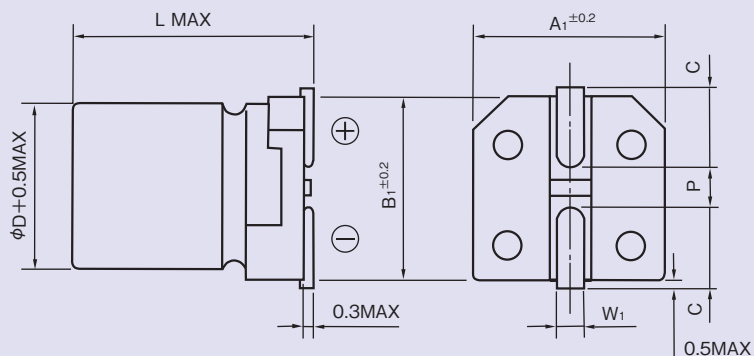
Rated Voltage (Vdc)	6.3	10	16	25	35
Voltage code	j	A	C	E	V

◆PART NUMBER

□□□ TKV □□□□□ M □□□ D×L
 Rated Voltage Series Capacitance Capacitance Tolerance Option Case Size

◆DIMENSIONS

(mm)



ϕD	L	A1	B1	C	W1	P
6.3	6.1	6.6	6.6	2.7	0.5~0.8	1.8
6.3	8	6.6	6.6	2.7	0.5~0.8	1.8
8	10.5	8.3	8.3	2.9	0.8~1.1	3.1
10	10.5	10.3	10.3	3.2	0.8~1.1	4.5

◆STANDARD SIZE

Size $\phi D \times L$ (mm), Rated Ripple Current (mA r.m.s./105°C, 100kHz), ESR (Ω MAX/20°C, 100kHz)

Vdc	Cap (μF)	Size ($\phi D \times L$)	Ripple	ESR	Vdc	Cap (μF)	Size ($\phi D \times L$)	Ripple	ESR
6.3	100	6.3×6.1	300	0.26	25	33	6.3×6.1	300	0.26
	220	6.3×6.1	300	0.26		68	6.3×6.1	300	0.26
	330	6.3×8	600	0.16		100	6.3×8	600	0.16
	470	8×10.5	850	0.08		150	8×10.5	850	0.08
	1000	8×10.5	850	0.08		220	8×10.5	850	0.08
	1500	10×10.5	1190	0.06		330	8×10.5	850	0.08
	1800	10×10.5	850	0.08		470	10×10.5	1190	0.06
10	150	6.3×6.1	300	0.26		560	10×10.5	850	0.08
	220	6.3×8	600	0.16	35	33	6.3×6.1	300	0.26
	330	8×10.5	850	0.08		47	6.3×6.1	300	0.26
	470	8×10.5	850	0.08		68	6.3×8	600	0.16
	680	8×10.5	850	0.08		100	6.3×8	600	0.16
	1000	10×10.5	1190	0.06			8×10.5	850	0.08
	1200	10×10.5	850	0.08		150	8×10.5	850	0.08
16	47	6.3×6.1	300	0.26		220	8×10.5	850	0.08
	100	6.3×6.1	300	0.26		330	10×10.5	1190	0.06
		6.3×8	600	0.16		390	10×10.5	850	0.08
	220	6.3×8	600	0.16					
	330	8×10.5	850	0.08					
	470	8×10.5	850	0.08					
	680	10×10.5	1190	0.06					
	820	10×10.5	850	0.08					