

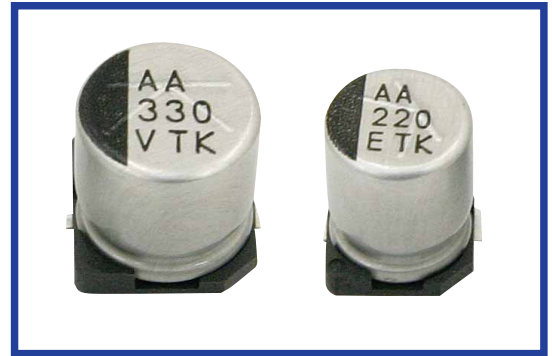
TKV SERIES

UPGRADE

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.



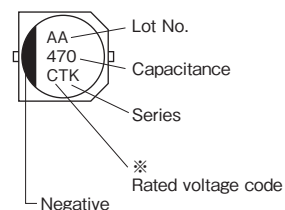
◆SPECIFICATIONS

Items	Characteristics																													
Category Temperature Range	-55~+105℃																													
Rated Voltage Range	6.3~35V.DC																													
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(V)																													
Dissipation Factor(MAX) (tanδ)	<table><tr><td>Rated Voltage (V)</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 (V)	6.3	10	16	25	35	tanδ	0.26	0.19	0.16	0.14	0.12												
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Endurance	After applying rated voltage with rated ripple current for 2000 hours at 105℃, the capacitors 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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Low Temperature Stability Impedance Ratio(MAX)	<table><tr><td>Rated Voltage (V)</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 (V)	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 (V)	6.3	10	16	25	35																									
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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	0.45	0.75	0.90	1.00
47~150μF	0.50	0.80	0.95	1.00
220~1800μF	0.60	0.85	0.95	1.00

◆MARKING



※Voltage code

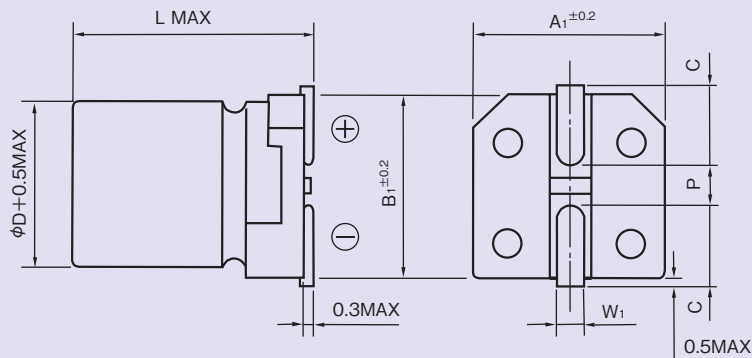
Rated Voltage (V)	6.3	10	16	25	35
Voltage code	j	A	C	E	V

◆PART NUMBER

□□□ Rated Voltage TKV Series □□□□□ Capacitance M Capacitance Tolerance □□□ Option D×L 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 φDXL(mm), Ripple current(mA r.m.s./105°C,100kHz), ESR(Ω MAX/20°C, 100kHz)

V.DC	Cap (μF)	Size (φDXL)	Ripple	ESR	V.DC	Cap (μF)	Size (φDXL)	Ripple	ESR
6.3 (0J)	100	6.3×6.1	300	0.26	25 (1E)	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 (1A)	150	6.3×6.1	300	0.26		560	10×10.5	850	0.08
	220	6.3×8	600	0.16	35 (1V)	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 (1C)	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					