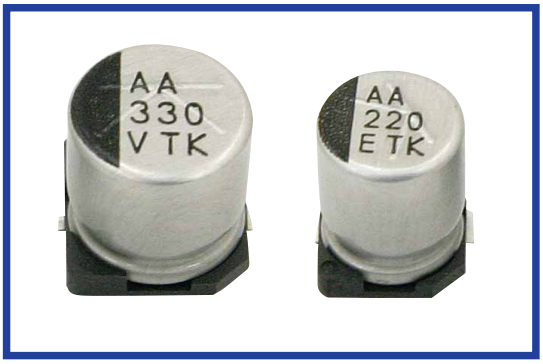
TKV SERIES

105℃ Low ESR , Lead Free Reflow Soldering



◆FEATURES

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

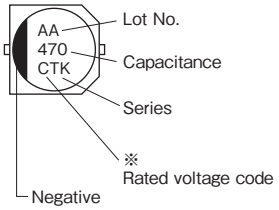
◆SPECIFICATIONS

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)	Rated Voltage (Vdc): 6.3 / 10 / 16 / 25 / 35 tanδ: 0.26 / 0.19 / 0.16 / 0.14 / 0.12 (20℃,120Hz)
Endurance	After applying rated voltage for 2000 hours at 105℃, the capacitor shall meet the following requirements. 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.
Low Temperature Stability Impedance Ratio(MAX)	Rated Voltage (Vdc): 6.3 / 10 / 16 / 25 / 35 (120Hz) 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≦
Coefficient	33uF	0.42	0.75	0.90	1.00
	47～150uF	0.44	0.80	0.95	1.00
	220～1800uF	0.60	0.85	0.95	1.00

◆MARKING



※Voltage code

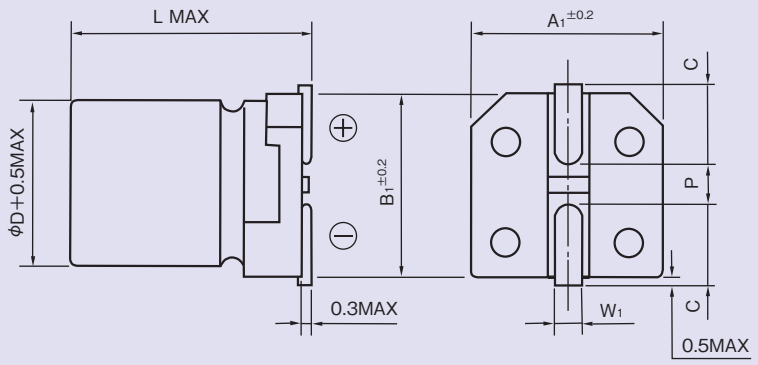
Rated Voltage (Vdc)	6.3	10	16	25	35
Voltage code	j	A	C	E	V

◆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 ϕDXL(mm), Rated Ripple Current(mA r.m.s./105℃,100kHz), ESR(Ω MAX/20℃, 100kHz)

Vdc	Cap (μF)	Size (ϕDXL)	Ripple	ESR
6.3	100	6.3×6.1	300	0.26
	220	6.3×6.1	300	0.26
	330	6.3×8	600	0.16
	470	8×10.5	850	0.08
	1000	8×10.5	850	0.08
	1500	10×10.5	1190	0.06
	1800	10×10.5	850	0.08
10	150	6.3×6.1	300	0.26
	220	6.3×8	600	0.16
	330	8×10.5	850	0.08
	470	8×10.5	850	0.08
	680	8×10.5	850	0.08
	1000	10×10.5	1190	0.06
	1200	10×10.5	850	0.08
16	47	6.3×6.1	300	0.26
	100	6.3×6.1	300	0.26
		6.3×8	600	0.16
	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

Vdc	Cap (μF)	Size (ϕDXL)	Ripple	ESR
25	33	6.3×6.1	300	0.26
	68	6.3×6.1	300	0.26
	100	6.3×8	600	0.16
	150	8×10.5	850	0.08
	220	8×10.5	850	0.08
	330	8×10.5	850	0.08
	470	10×10.5	1190	0.06
	560	10×10.5	850	0.08
35	33	6.3×6.1	300	0.26
	47	6.3×6.1	300	0.26
	68	6.3×8	600	0.16
	100	6.3×8	600	0.16
		8×10.5	850	0.08
	150	8×10.5	850	0.08
	220	8×10.5	850	0.08
	330	10×10.5	1190	0.06
	390	10×10.5	850	0.08