

MINIATURE SIZE

TK Series

Wide Temperature Range

JAMICON®

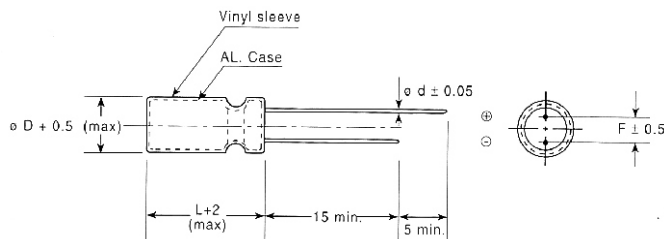
- High temperature 105°C and high reliability .

SPECIFICATION

Item	Characteristic															
Operation Temperature Range	-55 ~ +105°C	-40 ~ +105°C	-25 ~ +105°C													
Rated working Voltage	6.3 ~ 100VDC	160 ~ 400VDC	450VDC													
Capacitance Tolerance (120Hz 25°C)	±20%(M)															
Leakage Current (25°C)	6.3 ~ 100VDC	160 ~ 450VDC														
	$I \leq 0.01CV$ or $4 (\mu A)$		$I \leq 0.03CV + 40 (\mu A)$ max													
Whichever is greater after 3 minutes I: Leakage Current (μA) C: Rated Capacitance(μF) V: Working Voltage (V)																
Surge Voltage (25°C)	W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	
	S.V.	8	13	20	32	44	63	79	125	200	250	300	400	450	500	
Dissipation Factor ($\tan \delta$) (120Hz 25°C)	Add 0.02 per 1000 μF for more than 1000 μF															
	W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	
$\tan \delta$	0.24	0.20	0.17	0.15	0.12	0.10	0.10	0.08	0.15	0.15	0.15	0.20	0.20	0.20		
Low Temperature Stability	Impedance ratio at 120Hz															
	Rated Voltage (V)	6.3	10	16	25	35~100	160~250	350~400	450							
	-25°C/+25°C	4	3	2	2	2	3	6	15							
-40°C/+25°C	10	8	6	4	3	4	10	—								
Load Life	After 2000 hours application of WV at +105°C , the capacitor shall meet the following limits. ($\leq \phi 8$: 1000Hr)															
	Capacitance Change	$\leq \pm 25\%$ of initial value for 6.3~16W.V. , $\leq \pm 20\%$ of initial value for 25~450W.V.														
	Dissipation Factor	$\leq 200\%$ of initial specified value														
	Leakage current	\leq initial specified value														
Shelf Life	At +105°C no voltage application after 1000 hours and then through the aging treatment (reference JIS C 5102 4.4) , the capacitor shall meet the limits for load life characteristics .															
Reference Standard	JIS C 5102															

DIMENSIONS (mm)

ϕD	5	6.3	8	10	13	16	18	22	25
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10.0	12.5
d	0.5	0.5	0.6	0.6	0.6	0.8	0.8	1.0	1.0



RIPPLE CURRENT COEFFICIENTS

Temperature(°C)	65	85	105
Multiplier	1.75	1.40	1.00

Frequency(Hz)	60	120	1K	$\geq 10K$
W.V.	Multiplier			
6.3~25V	0.85	1.00	1.10	1.20
35~100V	0.80	1.00	1.15	1.25
160~250V	0.75	1.00	1.25	1.40
350~450V	0.70	1.00	1.30	1.80

Case size : DxL (mm)
 Max ripple current : mA (rms)
 (R.C.) : 105°C 120Hz

● CASE SIZE & MAX RIPPLE CURRENT

μ F	V(Code) Code	Item	6.3(0J)		10(1A)		16(1C)	
			DxL	R.C.	DxL	R.C.	DxL	R.C.
47	470				→	5x11	75	
100	101		5x11	95	5x11	100	5x11	110
220	221		5x11	140	5x11	150	6.3x11	190
330	331		6.3x11	200	6.3x11	210	8x11	270
470	471		6.3x11	230	6.3x11	260	8x11	320
1000	102		8x11	390	10x13	470	10x16	550
2200	222		10x16	660	10x21	810	13x21	950
3300	332		10x21	880	13x21	1040	13x26	1220
4700	472		13x21	1090	13x26	1280	16x25	1310
6800	682		13x26	1350	16x25	1390	16x32	1630
10000	103		16x25	1450	16x35	1760	18x35	1960
15000	153		16x35	1850	18x35	2050	20x40	2210
22000	223		18x42	2300	20x40	2460	22x50	2940
33000	333		22x50	2950	22x50	3020	25x50	3300

All blank voltage on sleeve marking is the same voltage as " → " point to.

μ F	V(Code) Code	Item	25 (1E)		35 (1V)		50 (1H)	
			Dx L	R.C.	Dx L	R.C.	Dx L	R.C.
0.1	0R1				→	5x11	5	
0.22	R22				→	5x11	7	
0.33	R33				→	5x11	8	
0.47	R47				→	5x11	10	
1	010				→	5x11	15	
2.2	2R2				→	5x11	22	
3.3	3R3				→	5x11	27	
4.7	4R7				→	5x11	32	
10	100		5x11	38	5x11	42	5x11	46
22	220		5x11	55	5x11	65	5x11	70
33	330		5x11	70	5x11	75	5x11	85
47	470		5x11	80	5x11	90	6.3x11	110
100	101		6.3x11	140	6.3x11	150	8x11	190
220	221		8x11	230	8x11	260	10x13	310
330	331		8x11	280	10x13	350	10x16	410
470	471		10x13	370	10x16	450	10x21	560
1000	102		10x21	660	13x21	810	13x26	970
2200	222		13x26	1100	16x25	1180	16x35	1470
3300	332		16x25	1240	16x35	1560	18x35	1780
4700	472		16x32	1530	18x35	1830		
6800	682		18x35	1880				
10000	103		20x40	2270				
15000	153		22x50	2840				
22000	223		25x50	3210				

μ F	V(Code)		63 (1J)		100 (2A)	
	Code	Item	Dx L	R.C.	Dx L	R.C.
0.1	0R1			—→	5x11	5
0.22	R22			—→	5x11	8
0.33	R33			—→	5x11	9
0.47	R47			—→	5x11	11
1	010			—→	5x11	16
2.2	2R2			—→	5x11	24
3.3	3R3			—→	5x11	30
4.7	4R7			—→	5x11	35
10	100		5x11	46	6.3x11	55
22	220		5x11	70	6.3x11	85
33	330		6.3x11	95	8x11	120
47	470		6.3x11	110	10x13	160
100	101		10x13	210	10x21	290
220	221		10x16	340	13x26	510
330	331		10x21	470	13x26	620
470	471		13x21	610	16x25	720
1000	102		16x25	940	18x42	1410
2200	222				22x50	2260

All blank voltage on sleeve marking is the same voltage as " —→ " point to.

μ F	V(Code)		160 (2C)		200 (2D)		250 (2E)	
	Code	Item	Dx L	R.C.	Dx L	R.C.	Dx L	R.C.
0.47	R47		6.3x11	9	6.3x11	10	6.3x11	11
1	010		6.3x11	14	6.3x11	15	6.3x11	16
2.2	2R2		6.3x11	20	6.3x11	22	6.3x11	24
3.3	3R3		6.3x11	25	6.3x11	26	8x11	33
4.7	4R7		6.3x11	29	8x11	36	8x11	39
10	100		8x11	49	10x13	60	10x16	70
22	220		10x16	85	10x21	110	13x21	130
33	330		10x21	120	13x21	140	13x21	150
47	470		13x21	160	13x21	170	13x26	200
100	101		13x26	250	16x25	260	16x32	320
220	221		16x35	420	18x42	520		
330	331		18x42	590				
470	471		22x40	770				
1000	102		25x50	1330				

μ F	V(Code)		350 (2V)		400 (2G)		450 (2W)	
	Code	Item	Dx L	R.C.	Dx L	R.C.	Dx L	R.C.
0.47	R47		8x11	11	8x11	11	10x13	12
1	010		8x11	16	8x11	16	10x13	17
2.2	2R2		8x11	23	10x13	26	10x21	31
3.3	3R3		10x13	31	10x13	32	13x21	41
4.7	4R7		10x13	37	10x16	42	13x21	49
10	100		10x21	65	13x21	75	16x25	75
22	220		13x26	120	13x26	120	16x32	130
33	330		16x25	140	16x32	160	18x35	170
47	470		16x35	190	18x35	210		
100	101		18x42	330	20x40	350		
220	221		22x50	580				