

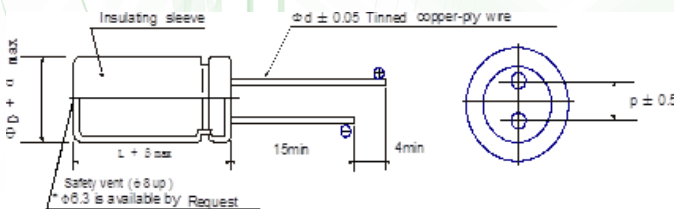
TK Series

- 105°C High Frequency , Low Impedance, High ripple current. For LED driver power.
- 4000 hours guaranteed for $\Phi D \leq \Phi 6.3$
- 6000 hours guaranteed for $\Phi D \geq \Phi 8$
- Rohs compliance.

◆ SPECIFICATIONS

Item		Characteristics								
Operating Temperature Range		-40 ~ +105°C					-25 ~ +105°C			
Voltage Range		35V~100V.DC					160~450V.DC			
Leakage Current		I = 0.03CV whichever is greater.(after 3 minutes) where,I: Max Leakage Current(μA), C: Nominal Capacitance(μF), V: Rated Voltage(V) (at 20°C)								
Dissipation Factor (tanδ) (at 120Hz, +20C)	Rated voltage(V.DC)	35V	50V	63V	80V	100V	160~250V	350, 400V	450V	
	tanδ(Max.)	0.15	0.1	0.1	0.08	0.08	0.15	0.15	0.15	
Low Temp. Impedance Stability at 120Hz	Rated voltage(V.DC)	35V	50V	63V	80V	100V	160~250V	350, 400V	450V	
	Z(-25°C)/Z(+20°C)	2	2	2	2	2	3	5	6	
	Z(-40°C)/Z(+20°C)	3	3	3	3	3	6	6	-	
Impedance(Ω)		See case size table								
High Temp. Load Test		After ΦD≧Φ6.3: 4000hrs, ΦD≧Φ8: 6000hrs, application of DC rated working voltage at +105°C , The capacitor shall meet the following limits . Capacitance change ..≧± 20% of the initial measured value Tanδ ..≧ 200% of the initial specified value DC leakage current ..≧ the initial specified value								
High Temp. Non-Load Test		After storage for 1000 hours at 105 with no voltage applied, voltage treatment of JIS-C-5102 article 4-4 is to be given and then measurement shall be made, The capacitor shall meet the following limits . Capacitance change ..≧± 20% of the initial measured value tanδ ..≧ 200% of the initial specified value DC leakage current ..≧ 500% of the initial specified value								

◆ DRAWING



ΦD	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5	0.5	0.5	0.6	0.6	0.8	0.8
β	+1.5						
α	+0.5						

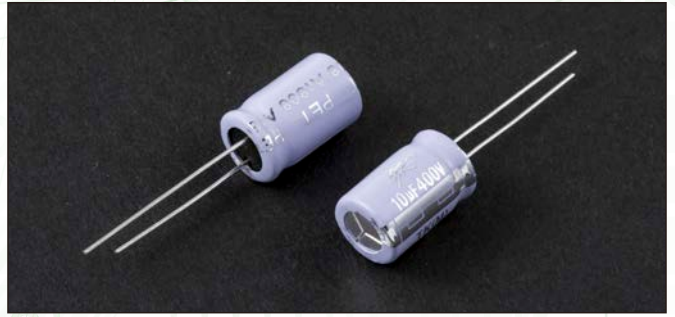
▼ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Freq.(HZ)	60(50)	120	1K	10K	100K
Cap(μ F)					
3.3~47	0.70	1.00	1.75	2.25	2.50
68~470	0.75	1.00	1.67	1.75	2.25

◆ PART NUMBERING SYSTEM

TK	□□□	□	□□□	□	□□
Series	Rated Cap.	Cap. Tolerance	Rated Voltage	Case Size D	Case Size L



TK Series

STANDARD RATINGS

Parameter	35				50			
	ΦDxL	Impedance	Ripple Current(mArms)		ΦDxL	Impedance	Ripple Current(mArms)	
	(mm)	Ω	105℃		(mm)	Ω	105℃	
		20℃,100KHZ	100KHZ			20℃,100KHZ	100KHZ	
Cap (μF)								
100	8x11.5	0.2	375		8x11.5	0.12	586	
220	8x15	0.084	945		10x16	0.042	724	
330	8x20	0.029	1250		10x25	0.028	1870	
470	10x16	0.028	1600		12.5x20	0.025	2110	
680	10x20	0.018	1850		12.5x30	0.021	2860	
1000	12.5x20	0.017	2550		16x25	0.023	2730	
1500	12.5x30	0.013	3450		18x25	0.019	3290	
2200	16x25	0.013	3630		16x32	0.015	3865	
3300	18x25	0.012	3840		18x35.5	0.013	4960	

Parameter	63				80			
	ΦDxL	Impedance	Ripple Current(mArms)		ΦDxL	Impedance	Ripple Current(mArms)	
	(mm)	Ω	105℃		(mm)	Ω	105℃	
		20℃,100KHZ	100KHZ			20℃,100KHZ	100KHZ	
Cap (μF)								
22	6.3x11	0.45	185		6.3x11	0.55	214	
33	6.3x11	0.35	214		6.3x11	0.46	267	
47	6.3x15	0.3	278		8x11.5	0.29	380	
100	8x15	0.18	688		8x20	0.16	735	
220	10x16	0.1	1103		10x25	0.069	1170	
330	10x25	0.07	1410		12.5x25	0.047	1620	
470	12.5x25	0.037	1990		16x25	0.036	2140	
560	12.5x30	0.032	2410		16x25	0.032	2340	

Parameter	100			
	ΦDxL	Impedance	Ripple Current(mArms)	
	(mm)	Ω	105℃	
		20℃,100KHZ	100KHZ	
Cap (μF)				
10	6.3x11	1.2	163	
22	8x11.5	0.46	267	
33	8x11.5	0.29	462	
47	10x12.5	0.17	585	
68	10x16	0.11	735	
100	10x20	0.084	1040	
220	12.5x25	0.047	1620	
330	16x25	0.036	2140	
470	16x31.5	0.032	2400	
560	16x35.5	0.029	2600	

TK Series

STANDARD RATINGS

Parameter	160				200			
	ΦDxL	Impedance	Ripple Current(mArms)		ΦDxL	Impedance	Ripple Current(mArms)	
	(mm)	Ω		105℃	(mm)	Ω		105℃
Cap (μF)		20℃,100KHZ		100KHZ		20℃,100KHZ		100KHZ
22	10x20	2.1		500	10x20	1.5		500
33	10x20	1.3		625	10x20	0.91		650
47	10x20	0.91		750	13x20	0.91		975
68	13x20	0.63		1175	13x25	0.63		1175
100	13x25	0.31		1395	16x25	0.27		1420
150	16x25	0.27		1735	16x25	0.27		1890
220	16x25	0.22		2295	18x25	0.25		2365
330	18x31.5	0.21		3130	18x35.5	0.22		3220
470	18x45	0.19		3715				

Parameter	250				350			
	ΦDxL	Impedance	Ripple Current(mArms)		ΦDxL	Impedance	Ripple Current(mArms)	
	(mm)	Ω		105℃	(mm)	Ω		105℃
Cap (μF)		20℃,100KHZ		100KHZ		20℃,100KHZ		100KHZ
10	10x16	3.5		350				
22	10x20	2.3		500	13x20	2.1		650
33	13x25	1.7		800	16x20	0.91		900
47	13x25	1.7		975	16x25	0.73		1075
68	16x25	0.78		1300	16x31.5	0.49		1400
100	16x31.5	0.63		1530	18x31.5	0.4		1575
150	18x31.5	0.42		1935				
220	18x31.5	0.35		2545				

Parameter	400				450			
	ΦDxL	Impedance	Ripple Current(mArms)		ΦDxL	Impedance	Ripple Current(mArms)	
	(mm)	Ω		105℃	(mm)	Ω		105℃
Cap (μF)		20℃,100KHZ		100KHZ		20℃,100KHZ		100KHZ
3.3	6.3X11	7.0		50	10x13	6.5		150
4.7	8X12	5.5		75	10X16	3.6		200
10	10x16	2.9		350	10X20	2.5		450
22	13x20	1.3		650	16x20	1.7		600
33	13x25	0.91		900	16x25	1.1		975
47	16x25	0.73		1175	18x25	0.93		1200
68	18x25	0.53		1465	18x31.5	0.71		1575
100	18x31.5	0.34		1172	18x40	0.41		1800
120	18x35.5	0.34		1945				
150	18x40	0.33		2215				