CK Series Surface-Mounted Device

JAMICON

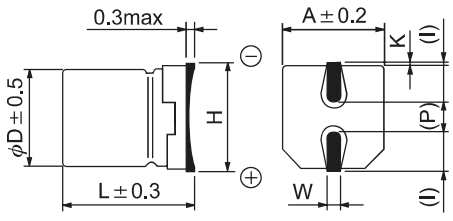
- Load life : 105°C 1000~2000 hours.
- For high density mounting.
- Impedance Lower than CF series
- Corresponding product to RoHS

SPECIFICATION

Item	Characteristic							
Operation Temperature Range	-55 ~ +105°C							
Rated Working Voltage	6.3 ~ 50VDC							
Capacitance Tolerance (120Hz 20°C)	±20%(M)							
Leakage Current (20°C)	I ≦0.01CV or 3 (μA) *Whichever is greater after 2 minutes I : Leakage Current (μA) C : Rated Capacitance (μF) V : Working Voltage (V)							
Surge Voltage (20°C)	W.V.		6.3	10	16	25	35	50
	S.V.		8	13	20	32	44	63
Dissipation Factor (tan δ) (120Hz 20°C)	Add 0.02 per 1000 μF for more than 1000 μF							
	W.V.		6.3	10	16	25	35	50
	tan δφ	φ4 ~ φ6.3	0.24	0.20	0.16	0.14	0.12	0.12
		φ8 ~ φ10	0.28	0.24	0.20	0.16	0.14	0.14
Low Temperature Stability	Impedance ratio at 120Hz							
	Rated Voltage (V)		6.3	10	16	25	35	50
	-40°C / +20°C		3	2	2	2	2	2
	-55°C / +20°C		5	4	4	3	3	3
Load Life	After hours (φD≦6.3mm 1000 hours, φD≧8mm 2000 hours) application of W.V. and +105°C ripple current value, the capacitor shall meet the following limits. (DC + ripple peak voltage ≦ rate working voltage)							
	Capacitance Change	≦±25% of initial value						
	Dissipation Factor	≦200% of initial specified value						
	Leakage current	≦initial specified value						
Shelf Life	At +105°C, no voltage application after 1000 hours, the capacitor shall meet the limits for load life characteristics. (With voltage treatment)							
Resistance to Soldering Heat	Capacitors placed on a 250°C hot plate for 30 seconds with their electrode terminals facing downward will fulfill the folowing conditions after being cooled to room temperature.							
	Capacitance Change	≦±10% of initial value						
	Dissipation Factor	≦initial specified value						
	Leakage current	≦initial specified value						

DIMENSIONS (mm)

D	L	A	H	I	W	P	K
4.0	5.8	4.3	5.5MAX	1.8	0.65±0.1	1.0	$0.35^{+0.15}_{-0.20}$
5.0	5.8	5.3	6.5MAX	2.2	0.65±0.1	1.5	$0.35^{+0.15}_{-0.20}$
6.3	5.8	6.6	7.8MAX	2.6	0.65±0.1	2.1	$0.35^{+0.15}_{-0.20}$
6.3	7.7	6.6	7.8MAX	2.6	0.65±0.1	2.1	$0.35^{+0.15}_{-0.20}$
8.0	10.2	8.3	10.0MAX	3.4	0.90±0.2	3.1	0.70±0.20
10.0	10.2	10.3	12.0MAX	3.5	0.90±0.2	4.6	0.70±0.20



( )reference size

Case size : D x L (mm)
Max impedance : Ω 20°C 100kHz
Max ripple current : mA(rms) 105°C 100kHz

CASE SIZE & MAX RIPPLE CURRENT

V(DC) / Item / μF	6.3			10			16			25			35			50		
	DxL	IMP.	R.C.	DxL	IMP.	R.C.	DxL	IMP.	R.C.	DxL	IMP.	R.C.	DxL	IMP.	R.C.	DxL	IMP.	R.C.
4.7													4x5.8	1.45	90	4x5.8	2.55	64
10										4x5.8	1.45	90	5x5.8	0.70	170	6.3x5.8	0.52	215
15							4x5.8	1.45	90	5x5.8	0.70	170	5x5.8	0.70	170	6.3x5.8	0.52	215
22				4x5.8	1.45	90	5x5.8	0.70	170	5x5.8	0.70	170	5x5.8	0.70	170	6.3x5.8	0.52	215
27	4x5.8	1.45	90	5x5.8	0.70	170	5x5.8	0.76	150	6.3x5.8	0.39	250	6.3x5.8	0.39	250	6.3x7.7	0.44	243
33	5x5.8	0.70	170	5x5.8	0.70	170	6.3x5.8	0.39	250	6.3x5.8	0.39	250	6.3x5.8	0.39	250	6.3x7.7	0.44	243
47	5x5.8	0.70	170	6.3x5.8	0.39	250	6.3x5.8	0.39	250	6.3x5.8	0.39	250	6.3x5.8	0.39	250	6.3x7.7	0.44	243
56	5x5.8	0.70	170	6.3x5.8	0.39	250	6.3x5.8	0.39	250	6.3x5.8	0.39	250	6.3x7.7	0.30	300	8x10.2	0.22	400
68	6.3x5.8	0.39	250	6.3x5.8	0.39	250	6.3x5.8	0.39	250	6.3x5.8	0.39	250	6.3x7.7	0.30	300	8x10.2	0.22	400
100	6.3x5.8	0.39	250	6.3x5.8	0.39	250	6.3x5.8	0.39	250	6.3x7.7	0.30	300	8x10.2	0.15	600	8x10.2	0.22	400
150	6.3x5.8	0.39	250	6.3x5.8	0.39	250	6.3x7.7	0.30	300	8x10.2	0.15	600	8x10.2	0.15	600	10x10.2	0.13	585
220	6.3x5.8	0.39	250	6.3x7.7	0.30	300	6.3x7.7	0.30	300	8x10.2	0.15	600	8x10.2	0.15	600	10x10.2	0.13	585
330	6.3x7.7	0.30	300	8x10.2	0.15	600	8x10.2	0.15	600	8x10.2	0.15	600	10x10.2	0.08	850			
470	8x10.2	0.15	600	8x10.2	0.15	600	8x10.2	0.15	600	10x10.2	0.08	850						
680	8x10.2	0.15	600	10x10.2	0.08	850	10x10.2	0.08	850									
1000	8x10.2	0.15	600	10x10.2	0.08	850												
1500	10x10.2	0.08	850															