CHIP TYPE

CT Series   Surface Mounted Device

Features
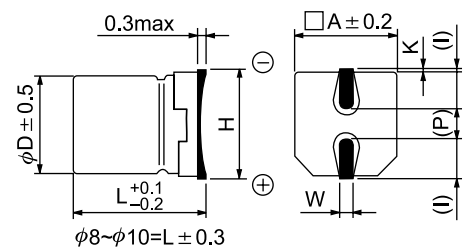
• 105°C 1000hours.

• For high density mounting.

● 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)		W.V.	6.3	10	16	25	35	50
	tan δ	φ4 ~ φ6.3	0.30	0.22	0.16	0.14	0.12	0.12
		φ8 ~ φ10	0.35	0.26	0.20	0.16	0.14	0.12

Low Temperature Stability	Impedance ratio at 120Hz						
	Rated Voltage (V)	6.3	10	16	25	35	50
	-25°C / +20°C	4	3	2	2	2	2
	-40°C / +20°C	8	6	4	4	3	3

Load Life	After 1000 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	≦±30% of initial value for 6.3 W.V., ≦±25% of initial value for 10~50 W.V.
	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	Capacitor placed on a 250°C hot plate for 30 seconds with their electrode terminals facing downward will fulfill the following 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	5.4	4.3	5.5MAX	1.8	0.65±0.1	1.0	0.35	+0.15 / -0.20
5.0	5.4	5.3	6.5MAX	2.2	0.65±0.1	1.5	0.35	+0.15 / -0.20
6.3	5.4	6.6	7.8MAX	2.6	0.65±0.1	2.1	0.35	+0.15 / -0.20
8.0	6.2	8.3	9.5MAX	3.4	0.65±0.1	2.2	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

0.3max

□A±0.2

φD±0.5

L +0.1 / -0.2

φ8~φ10=L±0.3

( )reference size

● CASE SIZE & MAX RIPPLE CURRENT

Case size : D x L (mm)
Max ripple current : mA(rms) 105°C 120Hz

µF	Code	6.3 (0J) DxL	R.C.	10 (1A) DxL	R.C.	16 (1C) DxL	R.C.	25 (1E) DxL	R.C.	35 (1V) DxL	R.C.	50 (1H) DxL	R.C.
0.1	0R1											4x5.4	2
0.22	R22											4x5.4	4
0.33	R33											4x5.4	4
0.47	R47											4x5.4	5
1.0	010											4x5.4	8
2.2	2R2											4x5.4	11
3.3	3R3											4x5.4	14
4.7	4R7							4x5.4	14	4x5.4	15	5x5.4	19
10	100					4x5.4	19	5x5.4	23	5x5.4	25	6.3x5.4	31
22	220	4x5.4	23	5x5.4	29	5x5.4	32	6.3x5.4	39	6.3x5.4	42	8x6.2	60
33	330	5x5.4	32	5x5.4	35	6.3x5.4	45	6.3x5.4	48	6.3x5.4 8x6.2	50 70	8x10.2	90
47	470	5x5.4	38	6.3x5.4	48	6.3x5.4	55	6.3x5.4 8x6.2	60 75	8x10.2	100	8x10.2 10x10.2	110 120
100	101	6.3x5.4	65	6.3x5.4 8x6.2	70 90	6.3x5.4 8x10.2	80 120	8x10.2	140	8x10.2 10x10.2	150 170	8x10.2 10x10.2	160 180
220	221	6.3x5.4	95	8x10.2	160	8x10.2 10x10.2	180 210	8x10.2 10x10.2	200 230	8x10.2 10x10.2	220 250	10x10.2	270
330	331	8x10.2	170			8x10.2 10x10.2	220 260	8x10.2 10x10.2	250 290	10x10.2	300		
470	471			8x10.2 10x10.2	230 270	8x10.2 10x10.2	270 300	10x10.2	340				
1000	102	8x10.2 10x10.2	290 340										
1500	152	10x10.2	410										