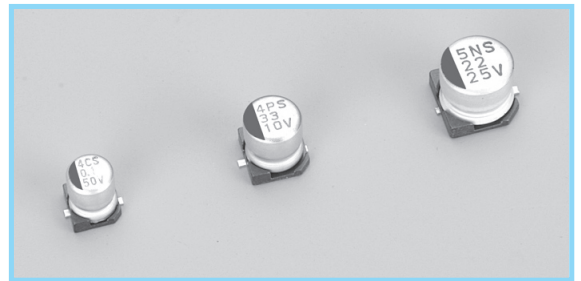


CS SERIES

Chip type, 85°C, standard

Features

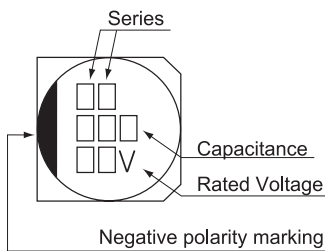
- Load life : 85°C, 2000 hours
- 5.5mm height
- For surface mounting



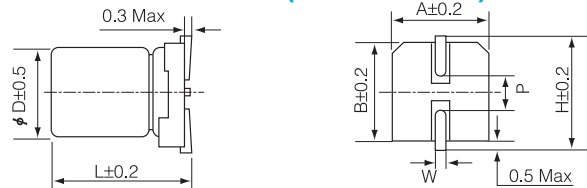
Specifications

Item	Performance Characteristics							
Operating temperature range	-40°C ~ +85°C							
Rated working voltage range	4.0V ~ 50V							
Nominal capacitance range	0.1μF ~ 220μF, ±20%(at 20°C, 120Hz)							
D.C Leakage current(at 20°C)	I ≤ 0.01CV or 3μA(2min), Whichever is greater.							
Tan δ (max., at 20°C, 120Hz)	W.V(V)	4.0	6.3	10	16	25	35	50
	Tan δ	0.35	0.26	0.20	0.17	0.15	0.13	0.10
Characteristics at low temperature (max.) (impedance ratio at 120Hz)	W.V(V)	4.0	6.3	10	16	25	35	50
	Z -25°C/Z 20°C	7	4	3	2	2	2	2
	Z -40°C/Z 20°C	15	8	6	4	4	3	3
Load life	After applying rated working voltage for 2000 hours at +85°C, and then being stabilized at +20°C, capacitors shall meet following limits. (4V : 1000hours)							
	Capacitance change	Within ± 20% of the initial measured value						
	Tan δ	≤200% of the initial specified value						
	Leakage current	≤The initial specified value						
Shelf life	After storage for 1000 hours at +85°C with no voltage applied and then being stabilized at +20°C, capacitors shall meet load life specification.							
Resistance to soldering heat	After reflow soldering(Refer to reflow soldering temperature profile ; see page 15) and then being stabilized at +20°C, capacitors shall meet following limits.							
	Capacitance change	Within ± 10% of the initial measured value						
	Tan δ	≤The initial specified value						
	Leakage current	≤The initial specified value						

Marking



Dimensions in mm (not to scale)



Size code	φD	L	A	B	P	H	W
B	4	5.3	4.3	4.3	1.0	5.0	0.5~0.8
C	5	5.3	5.3	5.3	1.5	5.9	0.5~0.8
D	6.3	5.3	6.6	6.6	2.0	7.2	0.5~0.8

Dimensions & Maximum permissible ripple current

Cap(μF)	W.V(V)		4.0(0G)		6.3(0J)		10(1A)		16(1C)		25(1E)		35(1V)		50(1H)	
	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R
0.1															B	1
0.22															B	2
0.33															B	3
0.47															B	5
1.0															B	10
2.2															B	16
3.3															B	16
4.7										B	22	B	22		C	23
10								B	28	C	28	C	30	D	D	35
22	B	19	B	29	B	34	C	39	D	55	D	60				
33	B	26	C	37	C	43	D	50	D	65						
47	B	34	C	46	D	54	D	70								
100	C	61	D	71												
220	D	82														

I_R : Maximum permissible ripple current [mA(rms) at 85°C, 120Hz]