CE-FS Series

105℃ Standard

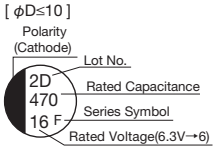
- 105℃ 1,000 to 2,000hours
- Solvent proof (within 2 minutes)
- AEC-Q200

■ Specifications

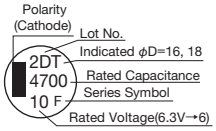
Items	Condition		Specifications							
Rated voltage (V)	–		6.3	10	16	25	35	50	63	100
Surge voltage (V)	Room temperature		8.0	13	20	32	44	63	79	125
Category temperature range (℃)	–		−55 to +105							−40 to +105
Capacitance tolerance (%)	120Hz/20℃		M : ±20							
Dissipation Factor(tan δ)	tanδ(max.) 120Hz/20℃	φ4 to φ6.3	0.24	0.20	0.16	0.14	0.12	0.10	0.12	0.10
		φ8 to φ16	0.28	0.24	0.20	0.16	0.14	0.12	0.12	0.10
		φ18	0.34	0.30	0.26	0.22	0.18	0.16	0.14	0.10
			Exceeding 1,000μF, +0.02 every 1,000μF							
Leakage current(LC)	μA/after 2minutes (max.), 20℃		The greater value of either 0.01CV or 3							
Impedance ratio at low temperature	Based on the value at 120Hz, +20℃	−40℃ Z/Z20℃	3	3	2	2	2	2	2	3
		−55℃ Z/Z20℃	8	5	4	3	3	3	3	–
Endurance	105℃ rated voltage applied (With the rated ripple current)	Test	φ4 to φ6.3 : 1,000hours, φ8 to φ18 : 2,000hours							
		△C/C	Within ±25% of the initial value							
		tanδ	Less than 200% of the specified value							
		LC	Less than the specified value							

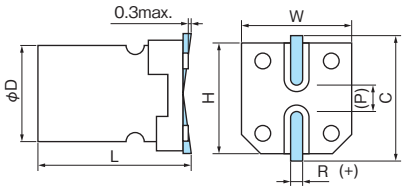
■ Marking, Dimensions

[φD≤10]



[φD≥12.5]





A pressure relief vent is provided for φD=8 or bigger

(P)reference size

(Unit : mm)

D±0.5	L	W±0.2	H±0.2	C±0.2	R	P
4	$5.4^{+0.1}_{-0.2}$	4.3	4.3	5.0	0.5 to 0.8	1.0
4	$6.0^{\pm0.3}$	4.3	4.3	5.0	0.5 to 0.8	1.0
5	$5.4^{+0.1}_{-0.2}$	5.3	5.3	6.0	0.5 to 0.8	1.4
6.3	$5.4^{+0.1}_{-0.2}$	6.6	6.6	7.3	0.5 to 0.8	2.2
6.3	$6.0^{\pm0.3}$	6.6	6.6	7.3	0.5 to 0.8	2.2
6.3	$7.7^{\pm0.3}$	6.6	6.6	7.3	0.5 to 0.8	2.2
8	$10.2^{\pm0.3}$	8.3	8.3	9.0	0.7 to 1.0	3.2
10	$10.2^{\pm0.3}$	10.3	10.3	11.0	1.0 to 1.4	4.6
12.5	$13.5^{\pm0.5}$	12.8	12.8	13.5	1.0 to 1.4	4.6
16	$16.5^{\pm0.5}$	16.3	16.3	17.3	1.7 to 2.1	7.0
18	$16.5^{\pm1.0}$	19.0	19.0	20.0	1.7 to 2.1	7.0
18	$21.5^{\pm1.0}$	19.0	19.0	20.0	1.7 to 2.1	7.0

■ Size, Rated Ripple Current

μF \ V	6.3		10		16		25		35	
4.7							4×5.4	13	4×5.4	14
10					4×5.4	18	5×5.4	20	5×5.4	21
22	4×5.4	22	5×5.4	25	5×5.4	27	6.3×5.4	36	6.3×5.4	38
33	5×5.4	27	5×5.4	30	6.3×5.4	40	6.3×5.4	44	6.3×6.0	42
47	5×5.4	33	6.3×5.4	41	6.3×5.4	48	6.3×6.0	48	6.3×6.0	49
100	6.3×5.4	50	6.3×5.4	53	6.3×5.4	60	6.3×7.7	91	6.3×7.7	84
150			6.3×6.0	62	6.3×7.7	95	8×10.2	140	8×10.2	155
220	6.3×6.0	67	6.3×7.7	105	6.3×7.7	105	8×10.2	175	8×10.2	190
330	6.3×7.7	105	8×10.2	195	8×10.2	195	8×10.2	220	10×10.2	300
470	8×10.2	210	8×10.2	210	8×10.2	230	10×10.2	300	12.5×13.5	410
680	8×10.2	210			10×10.2	310			12.5×13.5	430
1000	8×10.2	230	10×10.2	310			12.5×13.5	460	16×16.5	700
1500	10×10.2	310			12.5×13.5	500			16×16.5	740
2200			12.5×13.5	510			16×16.5	805	18×16.5	950
2700									18×21.5	1200
3300	12.5×13.5	520			16×16.5	840	18×16.5	1040		
3900							18×21.5	1280		
4700			16×16.5	880	18×16.5	1090				
5600					18×21.5	1300				
6800	16×16.5	930	18×16.5	1150						
8200			18×21.5	1350						
10000	18×16.5	1200								
12000	18×21.5	1350								

μF \ V	50		63		100	
0.47	4×5.4	3.5	4×5.4	3.5		
1.0	4×5.4	7.0	4×5.4	7.0	4×6.0	7.0
2.2	4×5.4	11	4×5.4	11	6.3×6.0	14
3.3	4×5.4	13	5×5.4	14	6.3×6.0	20
4.7	5×5.4	16	5×5.4	16	6.3×6.0	25
10	6.3×5.4	24	6.3×5.4	24	6.3×7.7	35
22	6.3×6.0	42	6.3×7.7	49	8×10.2	84
33	6.3×7.7	60	8×10.2	112	10×10.2	133
47	6.3×7.7	63	8×10.2	119	12.5×13.5	240
68			8×10.2	126	12.5×13.5	245
82	10×7.7	140				
100	8×10.2	140	10×10.2	196	16×16.5	490
150					16×16.5	500
220	10×10.2	220	12.5×13.5	287	18×16.5	650
330	12.5×13.5	365			18×21.5	700
390	12.5×13.5	380				
470			16×16.5	630		
680			18×16.5	750		
1000	16×16.5	655	18×21.5	900		
1500	18×21.5	1100				

Please refer to page 14 for ripple current frequency coefficients.

Case size:φDxL(mm)
φ16, φ18:CE-FST

Rated ripple current mArms(120Hz, 105℃)

■ Part number

FS

16 CE 470 FS
- FS: Series symbol
- 470: Rated capacitance
- CE: Type symbol
- 16: Rated voltage

FST

10 CE 4700 FS T
- T: Sn plating terminal option
- FS: Series symbol
- 4700: Rated capacitance
- CE: Type symbol
- 10: Rated voltage