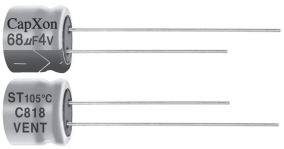
ST Series 5 mm 105℃

Features

- ◆ 5.0+1 mm max height
- ◆ Load life 105℃, 1000 hrs assured
- ◆ For detail specifications, please refer to Engineering Bulletin No. E112
- ◆ RoHS Compliant



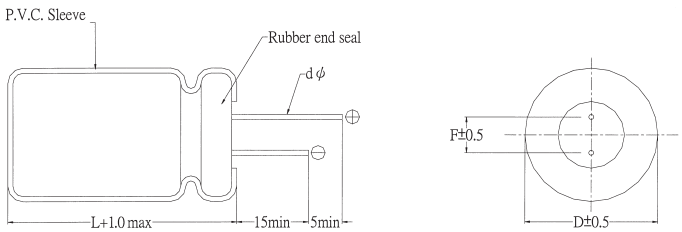
Specifications

Item	Performance Characteristics
Operating Temperature Range	-40 to +105℃
Rated Voltage Range	4 to 50 VDC
Capacitance Range	0.1 to 100 μF
Capacitance Tolerance	±20% (120Hz, +20℃)
Leakage Current(+20℃, max)	1≦0.01 CV or 3 (μA) After 2 minutes, whichever is greater measured with rated working voltage applied.
Dissipation Factor (tan δ，at 20℃，120Hz)	Working Voltage (VDC): 4 / 6.3 / 10 / 16 / 25 / 35 / 50 D.F. (%)max: 35 / 24 / 20 / 16 / 14 / 12 / 10
Low Temperature Characteristics (at 120Hz)	Impedance ratio max Working Voltage (VDC): 4 / 6.3 / 10 / 16 / 25 / 35 / 50 Z-25℃ / Z+20℃: 6 / 3 / 3 / 2 / 2 / 2 / 2 Z-40℃ / Z+20℃: 12 / 8 / 5 / 4 / 3 / 3 / 3
Load Life	Test conditions Duration time :1000 Hrs Ambient temperature :+105℃ Applied voltage :Rated DC working voltage After test requirements at +20℃ Capacitance change :≦ ±20% of the initial measured value (4V : ≦±30%) Dissipation factor :≦ 200% of the initial specified value Leakage current :≦ The initial specified value
Shelf Life	Test conditions Duration time :1000 Hrs Ambient temperature :+105℃ Applied voltage :None After test requirements at +20℃ : Same limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.

Multiplier for Ripple Current vs. Frequency

CAP(μF)＼Frequency(Hz)	50(60)	120	1K	≧10K
0.1~47	0.8	1	1.30	1.50
100~220	0.8	1	1.15	1.20

Diagram of Dimensions:(unit:mm)



Dψ	3	4	5	6.3	8
F	1.0±0.3	1.5±0.5	2.0±0.5	2.5±0.5	3.5±0.5
dψ	0.4	0.45			0.50

Case Size

ϕDxL(mm)

WV (SV) / Cap(μF)	4 (5)		6.3 (8)		10 (13)		16 (20)		25 (32)		35 (44)		50 (63)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1													3x5	1.0
													4x5	1.5
0.15													3x5	1.8
													4x5	2.0
0.22													3x5	2.3
													4x5	2.6
0.33													3x5	3.0
													4x5	3.2
0.47													3x5	3.5
													4x5	3.8
0.68													3x5	4.6
													4x5	5
1													3x5	5.6
													4x5	6.2
1.5													3x5	6.5
													4x5	7
2.2											3x5	7.5	3x5	8
											4x5	7.5	4x5	11
3.3									3x5	8.5	3x5	9	4x5	14
									4x5	8.5	4x5	11		
4.7							3x5	9	3x5	10	4x5	15	5x5	19
							4x5	9	4x5	13				
6.8					3x5	11	4x5	13	4x5	15	5x5	19	5x5	22
					4x5	11							6.3x5	25
10	3x5	10	3x5	12	4x5	15	4x5	18	5x5	23	5x5	25	6.3x5	30
	4x5	10	4x5	12										
15	4x5	13	4x5	15	4x5	18	5x5	23	6.3x5	32	6.3x5	32	8x5	35
22	4x5	22	4x5	22	5x5	27	5x5	30	6.3x5	39	6.3x5	48	8x5	50
33	5x5	30	5x5	30	5x5	35	6.3x5	45	6.3x5	48	8x5	50		
47	5x5	36	5x5	36	6.3x5	48	6.3x5	50	6.3x5	50				
									8x5	55				
68	6.3x5	52	6.3x5	52	6.3x5	53	8x5	55						
100	6.3x5	60	6.3x5	60	8x5	65	8x5	68						
220	6.3x5	80	6.3x5	80	8x5	83								

Ripple Current (mA, rms) at 105˚C 120Hz