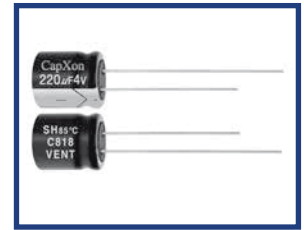


SH Series 7 mm 85°C Long Life

Features

- ◆ Long life 2000 hrs.
- ◆ Design for space-saving and high density insertion.
- ◆ Applications: VTR, car radio, car stereos, charger, etc.
- ◆ RoHS Compliant



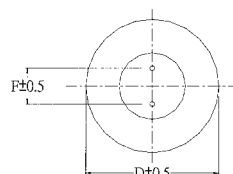
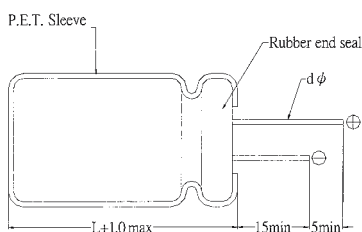
Specifications

Item	Performance Characteristics
Operating Temperature Range	-40 to +85°C
Rated Voltage Range	4 to 63 VDC
Capacitance Range	0.1 to 470 µF
Capacitance Tolerance	±20% (120Hz, +20°C)
Leakage Current(+20°C, max)	I ≤ 0.01 CV or 3 (µA) After 1 minute, whichever is greater measured with rated working voltage applied.
Dissipation Factor (tan δ, at 20°C, 120Hz)	Working Voltage (VDC)
	D.F. (%)max
Low Temperature Characteristics (at 120Hz)	Impedance ratio max
	Working Voltage (VDC)
	Z-25°C / Z+20°C
Endurance	Test conditions
	Duration time
	Ambient temperature
	Applied voltage
	After test requirement at +20°C
	Capacitance change
Shelf Life	Test conditions
	Duration time
	Ambient temperature
	Applied voltage
	After test requirement at +20°C
	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)	60(50)	120	400	1K	10K	50K-100K
CAP ≤ 10	0.8	1	1.30	1.45	1.65	1.70
10 < CAP ≤ 100	0.8	1	1.23	1.36	1.48	1.53
100 < CAP ≤ 1000	0.8	1	1.16	1.25	1.35	1.38

Diagram of Dimensions:(unit:mm)



Dφ	4	5	6.3	8
F	1.5±0.5	2.0±0.5	2.5±0.5	3.5±0.5
dφ	0.45		0.5	

Case Size

φ DxL(mm)

WV Cap(μF)	4		6.3		10		16		25	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
4.7									4x7	17
6.8							4x7	20	4x7	21
10							4x7	30	4x7	30
15					4x7	28			5x7	33
22	4x7	23	4x7	31	4x7	35	4x7	32	5x7	38
33	4x7	26	4x7	32	4x7	40	4x7	37	5x7	45
			5x7	35	5x7	45	5x7	50	6.3x7	48
47	4x7	35	4x7	40	4x7	47	5x7	42	5x7	52
			5x7	47	5x7	51	6.3x7	61	6.3x7	68
68	5x7	55	5x7	55	5x7	60	6.3x7	67	8x7	72
			6.3x7	68	6.3x7	72	6.3x7	75		
100	5x7	58	5x7	65	5x7	80	6.3x7	72	8x7	75
			6.3x7	75	6.3x7	90	8x7	105		
220	6.3x7	65	6.3x7	70	6.3x7	105				
			8x7	90	8x7	125				
330	6.3x7	90	8x7	120						
470	8x7	120								

WV Cap(μF)	35		50		63	
	Size	Ripple	Size	Ripple	Size	Ripple
0.1			4x7	1.5	4x7	1.5
0.15			4x7	1.8	4x7	1.8
0.22			4x7	2.5	4x7	2.5
0.33			4x7	3.5	4x7	3.5
0.47			4x7	5	4x7	6
0.68			4x7	7	4x7	7
1			4x7	10	4x7	12
1.5			4x7	13	4x7	14
2.2			4x7	19	4x7	19
3.3			4x7	24	5x7	25
4.7	4x7	22	4x7	27	5x7	29
			5x7	29	6.3x7	33
6.8	4x7	24	5x7	32	6.3x7	35
			5x7	28	6.3x7	33
10	4x7	30	5x7	35	6.3x7	40
			5x7	35	6.3x7	38
15	5x7	38	6.3x7	52	8x7	55
			6.3x7	45		
22	5x7	50	6.3x7	60	8x7	65
			6.3x7	58	8x7	63
33	6.3x7	54	8x7	78		
			8x7	68		
47	8x7	80				
68	8x7	85				

Ripple Current (mA, rms) at 85°C 120Hz