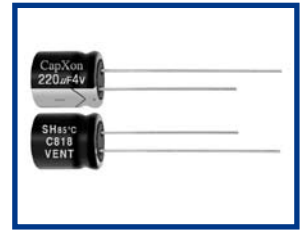


SH Series 7 mm 85°C Long Life

Features

- ◆ Long life 2000 hrs.
- ◆ Design for space-saving and high density insertion.
- ◆ Applications: VTR, car radio, car stereos, charger, etc.
- ◆ For detail specifications, please refer to Engineering Bulletin No. E137
- ◆ RoHS Compliant



Specifications

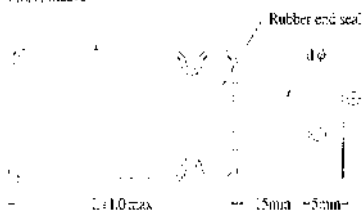
Item	Performance Characteristics								
Operating Temperature Range	-40 to +85°C								
Rated Voltage Range	4 to 63 VDC								
Capacitance Range	0.1 to 470 µF								
Capacitance Tolerance	±20% (120Hz, +20°C)								
Leakage Current(+20°C, max)	I ≤ 0.01 CV or 3 (µA) After 1 minute, whichever is greater measured with rated working voltage applied.								
Dissipation Factor (tan δ, at 20°C, 120Hz)	Working Voltage (VDC)	4	6.3	10	16	25	35	50	63
	D.F. (%)max	25	22	20	16	14	12	10	9
Low Temperature Characteristics (at 120Hz)	Impedance ratio max								
	Working Voltage (VDC)	4	6.3	10	16	25	35	50	63
	Z-25°C / Z+20°C	7	4	3	2	2	2	2	2
	Z-40°C / Z+20°C	15	8	6	4	4	3	3	3
Load Life	Test conditions								
	Duration time	:2000 Hrs							
	Ambient temperature	:+85°C							
	Applied voltage	:Rated DC working voltage							
	After test requirement at +20°C								
	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	:+85°C							
	Applied voltage	:None							
	After test requirement at +20°C : 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)	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)

P.I.C.T. Sleeve



D φ	4	5	6.3	8
F	1.5±0.5	2.0±0.5	2.5±0.5	3.5±0.5
d φ	0.45		0.5	

Case Size

		φ DxL(mm)									
WV (SV) Cap(μF)	4 (5)		6.3 (8)		10 (13)		16 (20)		25 (32)		
	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									5x7	33	
22	4x7	23	4x7	31	4x7	28	4x7	32	5x7	38	
33	4x7	26	4x7	32	4x7	40	4x7	45	5x7	48	
									6.3x7	60	
47	4x7	35	4x7	40	4x7	47	5x7	61	6.3x7	68	
									8x7	72	
68	5x7	55	5x7	55	5x7	60	6.3x7	72	6.3x7	75	
100	5x7	58	5x7	65	5x7	80	6.3x7	95	8x7	115	
220	6.3x7	65	6.3x7	70	6.3x7	105	8x7	105			
330	6.3x7	90	8x7	90	8x7	125					
470	8x7	120									

WV (SV) Cap(μF)	35 (44)		50 (63)		63 (79)	
	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