

## HV Series

### Features

- ◆ Long life of 2000 hrs at 105°C
- ◆ Reflow soldering is available
- ◆ Available for high density mounting
- ◆ For detail specifications, please refer to Engineering Bulletin No. E131
- ◆ RoHS Compliant



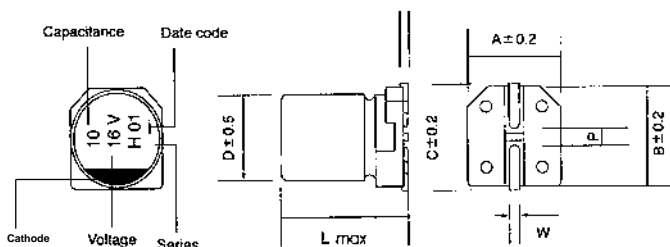
### Specifications

Item	Performance Characteristics
Operating Temperature Range	-55 +105°C
Rated Voltage Range	6.3~50 VDC
Capacitance Range	0.1 to 1500 μF
Capacitance Tolerance	±20%(120Hz,+20°C)
Leakage Current (+20°C,max.)	I ≤ 0.01 CV or 3 (μA) After 2 minutes, 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
	Rated voltage(VDC)
	Z-25°C / Z+20°C
Load Life	Test conditions
	Duration time
	Ambient temperature
	Applied voltage
Shelf Life	Test conditions
	Duration time
	Ambient temperature
	Applied voltage
Resistance to soldering heat	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristic requirements listed under.
	Leakage current
	Capacitance change

### Multiplier for Ripple Current vs. Frequency

CAP(μF)\Frequency(Hz)	60(50)	120	500	1K	≥10K
0.1 ≤ CAP ≤ 100 μF	0.8	1.0	1.20	1.30	1.50
100 < CAP ≤ 1500 μF	0.8	1.0	1.10	1.15	1.20

### Diagram of Dimensions:(unit:mm)



φD	L	A	B	C	W	P
4	5.5	4.3	4.3	4.9	0.5~0.8	1.0
5	5.5	5.3	5.3	5.9	0.5~0.8	1.4
6.3	5.5	6.6	6.6	7.2	0.5~0.8	2.2
6.3	7.7	6.6	6.6	7.2	0.5~0.8	2.2
8	6.5	8.3	8.3	9.0	0.5~0.8	2.3
8	10.5	8.3	8.3	9.0	0.7~1.1	3.1
10	10.5	10.3	10.3	11.0	0.7~1.1	4.5

## Case Size

φ DxL(mm)

WV (SV) Cap(μF)	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
0.1											4X5.5	1.0
0.22											4X5.5	2.0
0.33											4X5.5	3.0
0.47											4X5.5	4.0
1											4X5.5	8.4
2.2											4X5.5	11
3.3											4X5.5	13
4.7							4X5.5	12	4X5.5	14	4X5.5	18
10					4X5.5	20	4X5.5	22	4X5.5	24	6.3X5.5	28
22	4X5.5	23	4X5.5	25	4X5.5	31	5X5.5	38	5X5.5	40	6.3X7.7	50
					5X5.5	35			6.3X5.5	46	8X6.5	55
33	4X5.5	28	4X5.5	34	5X5.5	36	6.3X5.5	48	6.3X7.7	47	6.3X7.7	95
					6.3X5.5	40			8X6.5	50	8X10.5	135
47	4X5.5	37	5X5.5	40	5X5.5	45	6.3X7.7	56	6.3X7.7	60	6.3X7.7	115
	5X5.5	42			6.3X5.5	56	8X6.5	60	8X6.5	65	8X10.5	155
100	5X5.5	46	6.3X5.5	55	6.3X7.7	58	6.3X7.7	110	6.3X7.7	130	10X10.5	315
	6.3X5.5	57	8X6.5	60	8X6.5	62	8X10.5	160	8X10.5	180		
150	6.3X5.5	70	6.3X5.5	90	6.3X7.7	125	8X10.5	175	8X10.5	190	10X10.5	330
	8X6.5	90	8X6.5	110	8X6.5	140			8X10.5	180	8X10.5	250
220	6.3X7.7	90	6.3X7.7	140	6.3X7.7	170	8X10.5	180	8X10.5	250	10X10.5	350
	8X6.5	130	8X6.5	160	8X10.5	185	10X10.5	190	10X10.5	280		
330	6.3X7.7	140	8X10.5	195	8X10.5	250	8X10.5	290	10X10.5	360		
	8X10.5	170										
470	8X10.5	210	8X10.5	350	8X10.5	370	10X10.5	440				
			10X10.5	420	10X10.5	420						
560	8X10.5	310	10X10.5	450	10X10.5	480						
680	10X10.5	370	10X10.5	480	10X10.5	540						
1000	10X10.5	480	10X10.5	530								
1200	10X10.5	500										
1500	10X10.5	520										

Ripple Current ( mA, rms ) at 105°C