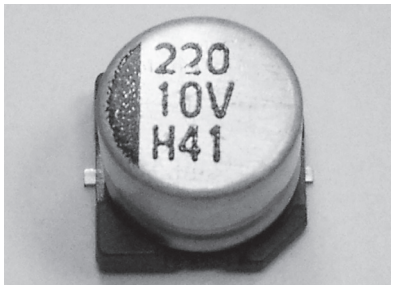
HV Series

Features

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



Specifications

Item	Performance Characteristics
Operating Temperature Range	-40 ~ +105℃
Rated Voltage Range	6.3 ~ 50 VDC
Capacitance Range	0.1 to 1000μF
Capacitance Tolerance	±20% (120Hz, +20℃)
Leakage Current (+20℃,max.)	I≦0.01CV or 3 (μA) After 2 minutes, whichever is greater measured with rated working voltage applied
Dissipation Factor (tan δ)	(+20℃,at 120Hz)

Rated voltage(VDC)	4	6.3	10	16	25	35	50
D.F. (%) max.	0.42	0.3	0.24	0.2	0.16	0.14	0.14

Low Temperature Characteristics (120Hz)	Impedane ratio max

Rated voltage(VDC)	4	6.3	10	16	25	35	50
Z-25℃ / AZ+20℃	8	6	4	4	3	2	2
Z-40℃ / AZ+20℃	16	12	10	8	6	4	4

Item	Performance Characteristics
Load Life	Test conditions Duration time :2000 Hrs Ambient temperature :+105℃ Applied voltage :Rated DC working voltage After test requirements at +20℃ : Capacitance change :Within ±30% of the initial value Dissipation factor :Not more than 300% of specified value Leakage current :Not more than the 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.

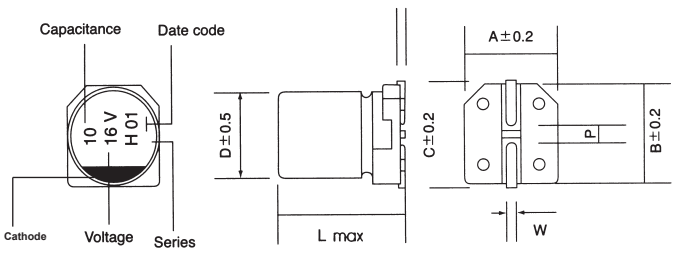
Multiplier for Ripple Current vs. Frequency

CAP(μF) \ Frequency(Hz)	60(50)	120	500	1K	≧10K
0.1~47μF	0.8	1.0	1.20	1.30	1.50
100~1000μF	0.8	1.0	1.10	1.15	1.20

Multiplier for Ripple Current vs. Temperature

Temperature(℃)	65	85	105
Multiplier	2.1	1.7	1.0

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	1.9
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

ϕDxL(mm)

WV (SV) / 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													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	46	8x6.5	55
33	4x5.5	22	4x5.5	28	4x5.5	34	5x5.5	40	6.3x5.5	48	8x6.5	55	8x10.5	135
							6.3x5.5	40						
47	4x5.5	27	4x5.5	37	5x5.5	40	6.3x5.5	56	6.3x5.5	60	6.3x5.5	65	8x10.5	155
100	5x5.5	43	6.3x5.5	57	6.3x5.5	60	8x6.5	100	8x10.5	180	8x10.5	180	10x10.5	315
220	6.3x5.5	51	8x6.5	130	8x6.5	160	8x6.5	165	10x10.5	190	10x10.5	360		
							8x10.5	185						
330	8x6.5	161	8x10.5	170	8x10.5	195	10x10.5	390	10x10.5	400	10x10.5	200		
470	8x10.5	200	8x10.5	210	10x10.5	440	10x10.5	450						
1000	10x10.5	230	10x10.5	480										

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