

DV Series

Features
 Lifetime: 105 , 2000hrs
 Long life for SV
 Low profile vertical chip

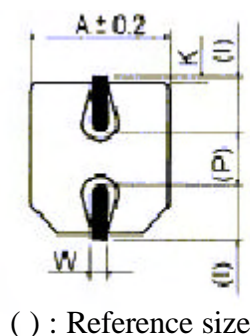
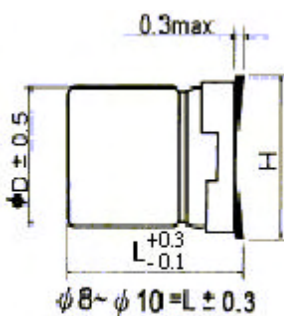
Recommended Applications
 AV(TV, Video, Audio)
 Monitor/Computer
 OA/HA/Communication



Specifications

Items	Characteristics						
Capacitance Tolerance	$\pm 20\%$ (M) (120Hz, 20)						
Rated Voltage Range (WV)	6.3~50 VDC						
Operating Temperature Range	-40 ~ +105						
Surge Voltage (V) (20)	WV	6.3	10	16	25	35	50
	SV	8	13	20	32	44	63
Leakage Current (Max) (20)	I = 0.01CV or 3 μ A whichever is greater (After rated voltage applied for 2 minutes)						
	I = Leakage Current (μ A) C = Nominal Capacitance (μ F) V = Rated Voltage (V)						
Dissipation Factor (Max) (tan) (120Hz, 20)	Shown in the table of standard rating						
Low Temperature Stability Impedance Ratio (Max)	WV	6.3	10	16	25	35	50
	Z(120Hz)						
	Z(-25) / Z(20)	4	3	2	2	2	2
	Z(-40) / Z(20)	8	6	4	4	3	3
Load Life	After applying rated voltage for 2000 hours at 105 , the capacitor shall meet the following requirement.						
	Case ()	4 to 6.3			8 to 10		
	Capacitance Change	Within $\pm 25\%$ of the initial value			Within $\pm 20\%$ of the initial value		
	Dissipation Factor	Not more than 200% of the specified value					
Shelf Life	After placed at 105 without voltage applied for 1000 hours, the capacitor shall meet the same requirement as load life.						
	Refer to JIS C 5101						
Applicable standards	Refer to JIS C 5101						

Dimensions (mm)



() : Reference size

D	L	A	H	I	W	P	K
4.0	5.4	4.3	5.5 Max	1.8	0.65 \pm 0.1	1.0 \pm 0.2	0.35 ^{+0.15} / _{-0.20}
5.0	5.4	5.3	6.5 Max	2.2	0.65 \pm 0.1	1.5 \pm 0.2	0.35 ^{+0.15} / _{-0.20}
6.3	5.4	6.6	7.8 Max	2.6	0.65 \pm 0.1	1.8 \pm 0.2	0.35 ^{+0.15} / _{-0.20}
8.0	6.2	8.3	9.5 Max	3.4	0.65 \pm 0.1	2.2 \pm 0.2	0.35 ^{+0.15} / _{-0.20}
8.0	10.2	8.3	10.0 Max	3.4	0.90 \pm 0.2	3.1 \pm 0.2	0.70 \pm 0.2
10.0	10.2	10.3	12.0 Max	3.5	0.90 \pm 0.2	4.6 \pm 0.2	0.70 \pm 0.2

Multiplier for Ripple Current

Frequency coefficient

Frequency (Hz)	60	120	1K	10K~100K
Coefficient	0.85	1.00	1.15	1.25

Temperature coefficient

Ambient Temperature ()	50	70	85	105
Coefficient	1.90	1.75	1.40	1.00

Case Size / tan / Max Ripple Current / ESR

CASE SIZE (DxL(mm)) / MAX DISSIPATION FACTOR (tan / 120Hz,20) / MAX PERMISSIBLE RIPPLE CURRENT (RC(mArms) / 120Hz, 105) / MAX EQUIVALENT SERIES RESISTANCE (ESR() / 120Hz,20)

WV	6.3				10				16			
SPEC μF	DxL	tan	RC	ESR	DxL	tan	RC	ESR	DxL	tan	RC	ESR
10									4x5.4	0.16	28	21.2
22	5x5.4	0.30	29	18.0	5x5.4	0.22	36	13.2	5x5.4	0.16	39	9.64
33	5*x5.4	0.30	43	12.0	5x5.4	0.22	45	8.84	6.3x5.4	0.16	65	6.43
47	6.3x5.4	0.30	46	8.46	6.3x5.4	0.22	70	6.20	6.3x5.4	0.16	70	4.51
100	6.3x5.4	0.30	71	3.97	8x6.2	0.30	110	3.97	8x10.2	0.20	140	2.65
220	8x10.2	0.35	150	2.11	8x10.2	0.30	160	1.80	10x10.2	0.20	210	1.20
330	8x10.2	0.35	230	1.40	10x10.2	0.26	230	1.04	10x10.2	0.20	230	0.803
470	10x10.2	0.35	260	0.987	10x10.2	0.26	270	0.733	10x10.2	0.20	275	0.564
1000	10x10.2	0.35	380	0.464	10x10.2	0.26	390	0.344				

WV	25				35				50			
SPEC μF	DxL	tan	RC	ESR	DxL	tan	RC	ESR	DxL	tan	RC	ESR
0.1									4x5.4	0.12	1	1593
0.22									4x5.4	0.12	2	723
0.33									4x5.4	0.12	3	482
0.47									4x5.4	0.12	5	338
1									4x5.4	0.12	10	159
2.2									4x5.4	0.12	16	72.3
3.3									4x5.4	0.12	16	48.2
4.7	4x5.4	0.14	22	39.5	5x5.4	0.12	23	33.8	5x5.4	0.12	23	33.8
6.8	4x5.4	0.14	25	27.3	5x5.4	0.12	27	23.4	5x5.4	0.12	30	23.4
10	5x5.4	0.14	28	18.5	5x5.4	0.12	30	15.9	5x5.4	0.12	35	15.9
22	6.3x5.4	0.14	55	8.44	6.3x5.4	0.14	60	7.23	8x10.2	0.12	70	7.23
33	6.3x5.4	0.14	65	5.62	8x6.2	0.14	84	5.62	8x10.2	0.12	91	4.82
47	8x6.2	0.16	91	4.51	8x10.2	0.14	98	3.95	10x10.2	0.12	100	3.38
100	8x10.2	0.16	130	2.12	10x10.2	0.14	160	1.85	10x10.2	0.12	145	1.59
220	10x10.2	0.16	273	0.964	10x10.2	0.14	240	0.844				