

reALcap™ ASV Series

- Low ESR (at 100kHz~300kHz).
- High Ripple Current.
- -55°C ~ +105°C.
- Endurance 105°C, 2,000~5,000hrs.

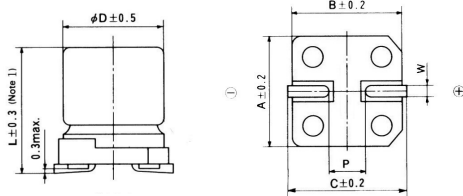


SPECIFICATIONS

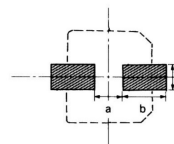
Item	Characteristics	
Category temperature range	-55 to +105°C	
Rated voltage range	4 to 25V _{DC}	
Surge voltage	Rated Voltage(WV)	4 6.3 10 16 20 25
	Surge Voltage(SV)	5.2 8.2 11.5 18.4 23 29
Capacitance tolerance	±20%(M) (at 20°C, 120Hz)	
Tangent of loss angle	Shall not exceed the value in Ratings of ASV series. (at 20°C, 120Hz)	
Leakage Current ※ 1	Shall not exceed the value in Ratings of ASV series. (at 20°C, 2 minutes)	
ESR	Shall not exceed the value in Ratings of ASV series. (at 20°C, 100kHz)	
Impedance Ratio (Characteristics at low temp.)	Impedance	Ratio
	Z(-25°C)/Z(+20°C)	≤ 1.15
	Z(-55°C)/Z(+20°C)	≤ 1.25
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for the specified time at 105°C.	
	Capacitance change	≤ ±20% of the initial value
Bias Humidity	Tan δ	≤ 150% of the initial specified value
	ESR	≤ 150% of the initial specified value
	Leakage current	≤ The initial specified value
	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them to the DC rated voltage at 60°C, 90~95%RH for 1,000 hours.	
	Capacitance change	≤ ±20% of the initial value
Endurance	Size	Time(Hrs)
	6.3×5.7	2,000Hrs
Bias Humidity	8×6.7	5,000Hrs
	8×10	
	8×11.5	
Endurance	10×10	

※ 1. If any doubt arises, remeasure the leakage current after following voltage treatment.(Voltage treatment:Applying rated voltage for 120minutes at 105°C)
 ※ 2. Reflow Conditions : Refer to 37 page

DIMENSIONS



Recommended solder land on PC board



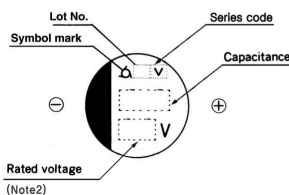
■ : Solder land on PC board

Note 1 : L±0.5 for 8×10.0(H10)~8×11.5(H12), L±0.7 for 10×10(J10)
 Note 2 : 6.3WV is marked by 6V

Unit(mm)

Case code	∅D	L	A	B	C	W	P	a	b	c
F60	6.3	5.7	6.6	6.6	7.2	0.5-0.8	1.9	1.9	3.5	1.6
H70	8.0	6.7	8.3	8.3	9.0	0.5-0.8	3.1	3.1	4.2	1.6
H10	8.0	10.0	8.3	8.3	9.0	0.7-1.1	3.1	3.1	4.2	2.2
H12	8.0	11.5	8.3	8.3	9.0	0.7-1.1	3.1	3.1	4.2	2.2
J10	10.0	10.0	10.3	10.3	11.0	0.7-1.1	4.5	4.5	4.4	2.2

MARKING



RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Freq.(Hz)	120 ≤ f < 1k	1k ≤ f < 10k	10k ≤ f < 100k	100k ≤ f < 500k
Factor	0.05	0.3	0.7	1

RATINGS OF ASV Series

Case Code	Rated Voltage (V)	Rated Capacitance(μ F)	ESR(m Ω) (at 100kHz)	Rated Ripple Current(mArms/105°C, 100kHz)	Tangent of loss angle	Leakage Current (μ A)
F60	4	150	30	2,250	0.10	120
	6.3	100	30	2,250	0.10	126
	6.3	120	30	2,250	0.10	151
	10	47	30	2,250	0.10	94
	10	56	30	2,250	0.10	112
	16	39	35	2,080	0.10	125
	16	47	35	2,080	0.10	150
	20	22	40	1,950	0.10	88
	25	10	45	1,840	0.10	50
	25	33	45	1,840	0.10	165
H70	4	330	35	2,560	0.10	264
	6.3	220	35	2,560	0.10	277
	10	120	35	2,560	0.10	240
	10	150	35	2,560	0.10	300
	16	82	40	2,120	0.10	262
	20	33	45	1,890	0.10	132
	20	47	45	1,890	0.10	188
H10	4	330	17	3,510	0.10	264
	6.3	270	17	3,510	0.10	340
	10	220	17	3,510	0.10	440
	16	180	20	3,240	0.10	576
	20	68	25	2,890	0.10	272
	25	47	30	2,640	0.10	235
H12	4	680	14	4,350	0.10	544
	6.3	470	15	4,210	0.10	592
	10	330	17	3,950	0.10	660
	16	180	20	3,640	0.10	576
	20	100	24	3,320	0.10	400
	25	33	30	2,980	0.10	165
J10	4	820	14	4,570	0.10	656
	6.3	560	14	4,570	0.10	706
	10	470	14	4,570	0.10	940
	16	330	16	4,280	0.10	1,056
	20	150	20	3,830	0.10	600
	25	56	25	3,430	0.10	280