reALcap™ AXV Series

- Super Low ESR, Large Capacitance.
- High Ripple Current.
- -55℃ ~ +105℃.
- Endurance 105℃, 2,000~5,000hrs.

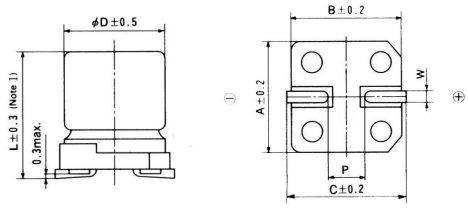
ASV → AXV
Low ESR

SPECIFICATIONS

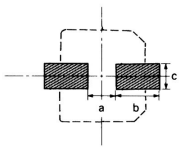
Item	Characteristics
Category temperature range	-55 to +105℃
Rated voltage range	4 to 25VDC
Surge voltage	Rated Voltage(WV): 4 / 6.3 / 10 / 16 / 20 / 25 Surge Voltage(SV): 5.2 / 8.2 / 11.5 / 18.4 / 23 / 29
Capacitance tolerance	±20%(M) (at 20℃, 120Hz)
Tangent of loss angle	Shall not exceed the value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

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

DIMENSIONS



Recommended solder land on PC board



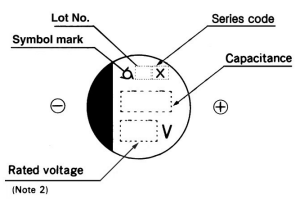
▨ : Solder land on PC board

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

Unit(mm)

Case code	ø 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
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 AXV Series

Case Code	Rated Voltage (V)	Rated Capacitance(μF)	ESR(mΩ) (at 100kHz)	Rated Ripple Current(mArms/ 105°C, 100kHz)	Tangent of loss angle	Leakage Current (μA)
F60	4	330	20	2,700	0.10	264
	6.3	220	20	2,700	0.10	277
	6.3	330	20	2,700	0.10	416
	10	150	20	2,700	0.10	300
	16	68	20	2,700	0.10	218
	16	100	20	2,700	0.10	320
	20	47	25	2,410	0.10	188
	25	47	30	2,200	0.10	235
H70	4	470	22	3,220	0.10	376
	6.3	390	22	3,220	0.10	491
	10	220	22	3,220	0.10	440
	10	270	22	3,220	0.10	540
	16	150	22	3,220	0.10	480
	20	68	25	3,020	0.10	272
	25	56	30	2,760	0.10	280
H12	4	1,000	14	4,350	0.10	800
	6.3	820	14	4,350	0.10	1,033
	10	680	14	4,350	0.10	1,360
	16	270	14	4,350	0.10	864
	16	470	14	4,350	0.10	1,504
	16	560	14	4,350	0.10	1,792
	20	270	14	4,350	0.10	1,080
	25	220	16	4,070	0.10	1,100
J10	4	2,200	14	4,570	0.10	1,760
	6.3	1,800	14	4,570	0.10	2,268
	10	1,000	14	4,570	0.10	2,000
	16	680	14	4,570	0.10	2,176
	20	390	14	4,570	0.10	1,560
	25	330	16	4,280	0.10	1,650