reALcap™ AQV Series

- High Voltage(50~80V)
- Wide Temperature range
- Endurance 125℃, 4,000hrs
- AEC-Q200 compliant : Please contact us for more details, test data, information.

AHV → AQV

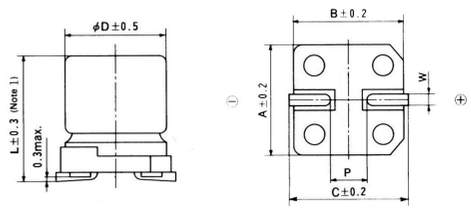
High Temp.

SPECIFICATIONS

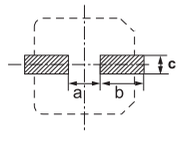
Item	Characteristics
Category temperature range	-55 to +125℃
Rated voltage range	50 to 80VDC
Surge voltage	Rated Voltage(WV): 50, 63, 80 Surge Voltage(SV): 57.5, 72.5, 92
Capacitance tolerance	±20%(M) (at 20℃, 120Hz)
Tangent of loss angle	Shall not exceed the value in Ratings of AQV series. (at 20℃, 120Hz)
Leakage Current ※ 1	Shall not exceed the value in Ratings of AQV series. (at 20℃, 2minutes)
ESR	Shall not exceed the value in Ratings of AQV 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 4,000 hours at 125℃. Capacitance change ≦ ±20% of the initial value Tan δ ≦ 200% of the initial specified value ESR ≦ 200% of the initial specified value Leakage current ≦ The initial specified value
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 500 hours. Capacitance change ≦ ±20% of the initial value Tan δ ≦ 200% of the initial specified value ESR ≦ 200% 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 125℃)
※ 2. Reflow Conditions : Refer to 37 page

DIMENSIONS



Recommended solder land on PC board



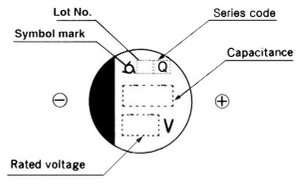
▨ : Solder land on PC board

Note 1 : L±0.5 for 8×11.5(H12), L±0.7 for 10×10(J10)

Unit(mm)

Case code	ø D	L	A	B	C	W	P	a	b	c
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 AQV Series

Case Code	Rated Voltage (V)	Rated Capacitance (μF)	ESR(mΩ) (at 100kHz)	Rated Ripple Current(mArms/ 125℃, 100kHz)	Tangent of loss angle	Leakage Current (μA)
H70	50	12	45	960	0.10	120
	63	10	50	910	0.10	126
H12	50	47	35	1,500	0.10	470
	63	33	40	1,410	0.10	416
	80	15	45	1,340	0.10	240
J10	50	68	30	1,610	0.10	680
	63	47	35	1,520	0.10	592
	80	22	40	1,440	0.10	352