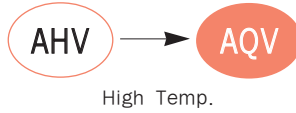


## reALcap™ AQV Series

- High Voltage(50~80V)
- Wide Temperature range
- Endurance 125°C, 3,000hrs



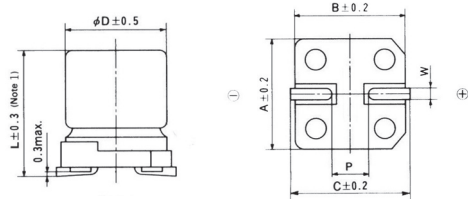
### SPECIFICATIONS

Item	Characteristics			
Category temperature range	-55 to +125°C			
Rated voltage range	50 to 80V <sub>DC</sub>			
Surge voltage	Rated Voltage(WV)	50	63	80
	Surge Voltage(SV)	57.5	72.5	92
Capacitance tolerance	±20%(M) (at 20°C, 120Hz)			
Tangent of loss angle	Shall not exceed the value in Ratings of AQV series. (at 20°C, 120Hz)			
Leakage Current ※ 1	Shall not exceed the value in Ratings of AQV series. (at 20°C, 2minutes)			
ESR	Shall not exceed the value in Ratings of AQV series. (at 20°C, 100kHz)			
Impedance Ratio (Characteristics at low temp.)	Impedance	Ratio		
	Z(-55°C)/Z(+20°C)	≤ 1.25		
	Z(+105°C)/Z(+20°C)	≤ 1.25		(at 100kHz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 3,000 hours at 125°C.			
	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°C after subjecting them to the DC rated voltage at 60°C, 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		
Surge voltage	The following specifications shall be satisfied when the capacitors are restored to +20°C after the surge voltage is at a cycle of 360seconds which consist charge for 30 seconds and discharge for 330 seconds, for 1000 cycles at 125°C.			
	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		

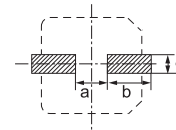
※ 1 : If any doubt arises, remeasure the leakage current after following voltage treatment.(Voltage treatment : Applying rated voltage for 120minutes at 125°C)

Conductive Polymer

### DIMENSIONS

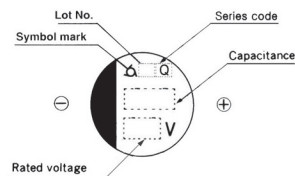


### Recommended solder land on PC board



■ : Solder land on PC board

### MARKING



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

Unit(mm)

Case code	φ 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
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

### 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



## CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS

### RATINGS OF AQV Series

Case Code	Rated Voltage (V)	Rated Capacitance ( $\mu$ F)	ESR(m $\Omega$ ) (at 100kHz)	Rated Ripple Current(mArms) at 100kHz	Tangent of loss angle	Leakage Current ( $\mu$ A)
F70	50	33	45	1,300	0.10	330
	63	22	50	1,100	0.10	277
H12	50	68	35	2,800	0.10	680
	63	47	40	2,500	0.10	592
	80	27	45	1,600	0.10	432
J10	50	100	25	2,950	0.10	1,000
	63	68	30	2,600	0.10	857
	80	39	35	1,700	0.10	624