

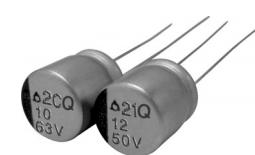
reALcap™ AQA Series

- High Voltage(50~80V)
- Wide Temperature range
- Endurance 125°C, 4,000hrs

AHA

AQA

High Temp.

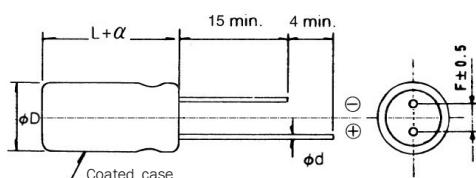
SPECIFICATIONS

Item	Characteristics						
Category temperature range	-55 to +125°C						
Rated voltage range	50 to 80V _{DC}						
Surge voltage	Rated Voltage(WV)	50	63	80			
	Surge Voltage(SV)	57.5	72.5	92			
Capacitance tolerance	$\pm 20\%$ (M) (at 20°C, 120Hz)						
Tangent of loss angle	Shall not exceed the value in Ratings of AQA series. (at 20°C, 120Hz)						
Leakage Current * 1	Shall not exceed the value in Ratings of AQA series. (at 20°C, 2 minutes)						
ESR	Shall not exceed the value in Ratings of AQA series. (at 20°C, 100kHz)						
Impedance Ratio (Characteristics at low temp.)	Impedance	Ratio					
	$Z(-25^\circ\text{C})/Z(+20^\circ\text{C})$	≤ 1.15					
	$Z(-55^\circ\text{C})/Z(+20^\circ\text{C})$	≤ 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 4,000 hours at 125°C. Capacitance change $\leq \pm 20\%$ of the initial value Tan δ $\leq 200\%$ of the initial specified value ESR $\leq 200\%$ of the initial specified value Leakage current \leq 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 $\leq \pm 20\%$ of the initial value Tan δ $\leq 200\%$ of the initial specified value ESR $\leq 200\%$ of the initial specified value Leakage current \leq 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)

DIMENSIONS

Coating Case Type



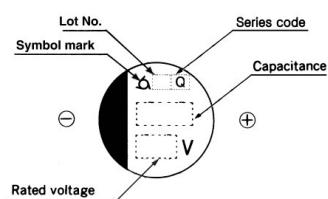
Unit(mm)			
$\phi D(+0.5\text{max.})$	8.0	8.0	10.0
L	7.0	11.5	10.0
α	0.5		
$\phi d(\pm 0.05)$	0.45	0.6	0.6
F(± 0.5)	3.5	3.5	5.0

RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

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

MARKING





CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS

RATINGS OF AQA Series

Case Size (Ø D × L) (mm)	Rated Voltage (V)	Rated Capacitance (μ F)	ESR($m\Omega$) (at 100kHz)	Rated Ripple Current(mArms /125°C, 100kHz)	Tangent of loss angle	Leakage Current (μ A)
8×7	50	12	45	960	0.10	120
	63	10	50	910	0.10	126
8×11.5	50	47	40	1,500	0.10	470
	63	33	45	1,410	0.10	416
	80	15	50	1,340	0.10	240
10×10	50	68	40	1,610	0.10	680
	63	47	45	1,520	0.10	592
	80	22	50	1,440	0.10	352
10×12.5	50	82	37	1,740	0.10	820
	63	68	42	1,630	0.10	857
	80	33	45	1,580	0.10	528