

## reAlcap™ ARV Series

- Stable Leakage Current Characteristics at SV (after Reflow)
- Low ESR (at 100kHz~300kHz)
- Endurance 105°C, 2,000hrs



Stable Leakage Current Characteristics at SV(after Reflow)

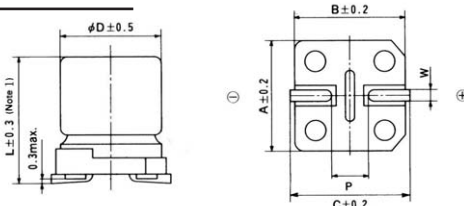


### SPECIFICATIONS

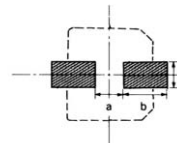
Item	Characteristics		
Category temperature range	-55 to +105°C		
Rated voltage range	16 to 20V <sub>DC</sub>		
Surge voltage	Rated Voltage(WV)	16	20
	Surge Voltage(SV)	18.4	23.0
Capacitance tolerance	±20%(M)		(at 20°C, 120Hz)
Tangent of loss angle	Shall not exceed the value in Ratings of ARV series.		(at 20°C, 120Hz)
Leakage Current * 1	Shall not exceed the value in Ratings of ARV series.		(at 20°C, 2 minutes)
ESR	Shall not exceed the value in Ratings of ARV series.		(at 20°C, 100kHz)
Impedance Ratio (Characteristics at low temp.)	Impedance	Ratio	(at 100kHz)
	Z(-25°C)/Z(+20°C)	≤ 1.25	
	Z(+125°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 2,000 hours at 105°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		
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 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		
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 105°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		
Resistance to Reflow heat (Refer to 67page)	The following specifications shall be satisfied when the capacitors are restored to +20°C after Reflow Soldering at 250°C (within 10seconds). Capacitance change ≤ ±15% of the initial value Tan δ ≤ The initial specified value ESR ≤ The initial specified value Leakage current ≤ The initial specified value (at WV or SV)		

\* 1: If any doubt arises, remeasure the leakage current after following voltage treatment.(Voltage treatment: Applying rated voltage for 120minutes at 105°C)

### DIMENSIONS

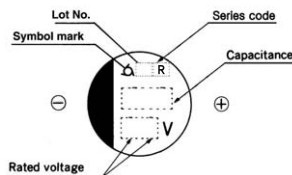


### Recommended solder land on PC board



■ : Solder land on PC board

### MARKING



Note 1 : L±0.5 for 8×11.5(H12)~10×12.2(J12)

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
H12	8.0	11.5	8.3	8.3	9.0	0.7-1.1	3.1	3.1	4.2	2.2
J12	10.0	12.2	10.3	10.3	11.0	0.7-1.1	4.5	4.5	4.4	2.2



## RATINGS OF ARV 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)
F60	20	22	40	1,950	0.10	88
	16	39	35	2,080	0.10	125
H70	20	33	45	1,890	0.12	132
	16	82	40	2,120	0.12	262
H12	20	100	24	3,320	0.15	400
	16	180	20	3,640	0.15	576
J12	20	150	20	4,320	0.15	600
	16	330	16	4,720	0.15	792