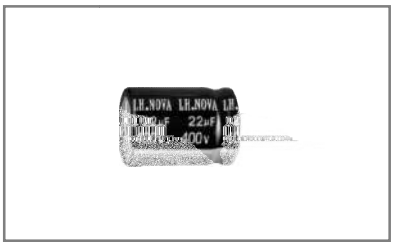


■ARK

ARK Series Aluminum Electrolytic Capacitor

Feature

* : 130 2000
Load life:130 2000 hours.
*
High temperature.
* AEC-Q200
Compliant to the AEC-Q200 Directive.
* RoHS
Compliant to the RoHS Directive.

Application

*
Ideally suited for automobile modules switching power supplies, and other electronic products.

Part Number

8	2 2 0	L F	M	A A 1 2	A K	N	0	3 B	0

Code	Type
8	Product

Code	Voltage
LO	4
LA	6.3
LB	10
LC	16
LD	25
LE	35
LF	50
LG	63
MA	100
VA	400

Code	Dimensions ΦDxL(mm)
0511	Φ5x11
AA12	Φ6.3x12
0812	Φ8x12
1020	Φ10x20
AB20	Φ12.5x20

Code	Trademark
N	LH.NOVA

Code	Intermal Code
1B	130 130 Automotive electronics cartronics

Code	Lead Forming Type
0	Bulk
P	original type(vertical) tape

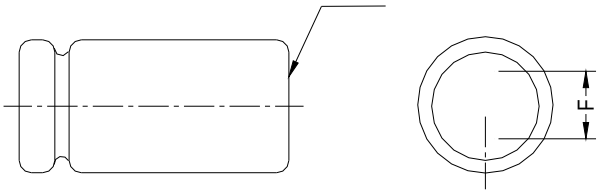
Code	Nominal Capacitance
1R0	1uF
2R2	2.2uF
221	220uF

Code	Tolerance
K	±10%
V	$\pm^{20}_{10}$%
M	±20%

Code	Series
AK	ARK

Code	Sleeve Color
0	No label

Product Structure



β(mm)	±0.5			±1.0				
ΦD(mm)	5	6.3	8	10	12.5	16	18	22
F±0.5(mm)	2.	2.5	3.5	5.0		7.5		10.0
Φd±0.1(mm)	0.5		0.6			0.8		
L(mm)	11,12		12,16	12,16,	16,20,25	16,20,25,30,35	20,25,30,35,40	25,30,35,40
	L±2.0							

Main specifications

`	Performance Characteristics	
Rated Voltage Range	10~100V.DC	160~450V.DC
Operating Temperature Range	-40 ~+130	-40 ~+130
Nominal Capacitance Range	1~4700 F	4.7~220 F
Capacitance Tolerance	±20% M +25 120Hz	

Leakage Current (25)

(V) Rated working voltage	10~100	160~450
Leakage current	2 I≤0.01CV 3(μA), After 2 min. I≤0.01CV or 3(μA), Whichever is greater.	2 I≤0.03CV+25(μA) After 2 min . I≤0.03CV+25(μA)

C μF Nominal Capacitance in μF

V V Rated working voltage in V

DF Dissipation Factor

(V) Rated working voltage	10	16	25	35	50	63	80~100	160~450
DF(MAX) (25 ,120Hz)	0.35	0.22	0.20	0.17	0.15	0.12	0.10	0.15

1000μF 1000μF DF 0.02

For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF.

Surge Voltage

(V) Rated working voltage	10	16	25	35	50	63	100	160	200	250	350	400	450
(V) Surge voltage	13	20	32	44	63	79	125	200	250	300	400	450	500

Temperature Stability

(V) Rated working voltage		10	16	25	35	50	63	100	160~250	350~450
(120Hz) Impedance Ratio	z-25 /z+25	4	3	2	3	3	3	3	3	6
	z-40 /z+25	6	6	4	3	3	3	3	--	--

Load life

+130 2000 ,

After application of rated working voltage with max permissible ripple current specified at +130 for 2000hours, capacitors meet the characteristics requirements measured at +20 listed at below:

1 :±20%

Capacitance change : ±20% initial measured value

2 : ≤

Leakage current: ≤initial specified value

3 ≤200%

Dissipation factor: ≤200% initial specified value

Shelf life

+130 1000 , JIS-C-5101-4 30min,, 24 48

:

After leaving capacitors under no load at +130 for 1000 hours, According to JIS-C-5101-4, apply the rated DC voltage for 30 minutes and store the capacitors under room temperature for 24-48 hours. The capacitors meet the characteristics listed as below:

1 :±20%

Capacitance change : ±20% initial measured value

2 : ≤

Leakage current:≤initial specified value

3 ≤200%

Dissipation factor: ≤200% initial specified value

Dimensions and ripple current and frequency coefficient

Ripple current frequency coefficient

Freq Hz / WV(V)	50 (60)	100 (120)	1K	10K	≥100K
6.3~100	0.20	0.40	0.70	0.80	1.00
160~450	0.25	0.50	0.80	0.90	1.00

Dimensions and ripple current

WV/V / Cap/μF	10		16		25		35		50		63		100	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
1									5×11	35	5×11	35	5×11	40
2.2									5×11	50	5×11	50	6.3×12	70
3.3									5×11	70	5×11	70	6.3×12	80
4.7									5×11	100	5×11	100	8×12	100
10									6.3×12	200	6.3×12	200	8×12	200
22									6.3×12	260	6.3×12	250	8×12	220
33									6.3×12	300	6.3×12	250	10×12	260
47									6.3×12	300	10×12	400	10×16	330
100							8×12	360	10×12	520	10×16	450	12.5×20	670
220					8×12	360	10×12	620	10×16 10×20	890	12.5×20	820	16×25	1100
330	8×12	360	8×12	360	10×12	620	10×16	800	12.5×20	1000	12.5×25	1000	16×30	1300
470	10×12	620	10×12	620	10×16	800	10×20	960	12.5×25	1200	16×25	1500	16×30 18×30	1600
1000	10×20	960	10×20	960	12.5×20	1100	12.5×25	1430	16×30	2180	16×30	1850		
2200	12.5×25	1430	12.5×25	1430	16×30	2300	16×35	2550	18×40	2800	18×40	2350		
3300	16×25	1900	16×30	2300	16×35	2550	18×35	2800						
4700	18×30	2300	16×35	2550										

(1) Case Size D × L(mm)

(2) Max allowable ripple current (mA rms +130 ,100kHz)

WV/V / Cap/μF	160		200		250		350		400		450	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
2.2									6.3×12	80	8×12	100
4.7									8×12 10×16	100 180	10×20	150
6.8							10×16	220	8×16 10×16	150 220	12.5×20	320
10	10×16	250	10×16	250	10×20	280	10×20	280	10×20 12.5×20	280 280	16×25 18×20	560
22	10×20	500	10×20	500	12.5×20	600	12.5×20	350	12.5×25 16×20	430	16×30 18×25	700
33	10×20	500	12.5×20	600	12.5×20	600	16×20	500	16×25 18×20	640	18×30	880
47	12.5×20	660	12.5×20	660	12.5×25 16×20	720	16×25 18×20	660	16×30 18×25	840		
68	12.5×25 16×20	760	12.5×25 16×20	760	16×25 18×20	920	16×30 18×25	850	18×30	1000		
100	16×25 18×20	1120	16×25 18×20	1120	16×30 18×25	1200						
150	16×30 18×25	1360	16×30 18×25	1360	18×30	1500						
220	16×30 18×25	1400	18×30	1700								

(1) Case Size D × L(mm)

(2) Max allowable ripple current (mA rms +130 ,100kHz)

Packaging

* Taped packaging quantity

ΦD(mm)	Qty. (Pcs)