FPCAP Functional Polymer Aluminum Solid Electrolytic Capacitors

VA & VB series

SMD | 7.3×4.3×2.8 | 3mm Height | Low ESR | Lead-free | RoHS Compliance

NEW

●Features

By using Aluminum Functional Polymer.
- Low ESR at a high frequency range.
- High ripple current capability.

●Applications

- Switching Power Supply and DC/DC Converter.
- Back up Power Supplies of CPU(VRM etc.)
- Miniature high Power Supply.

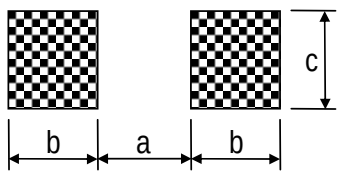
●Environmental Correspondence

Any environmental hazardous substances are not used.
- The lead free of terminal plating (Sn 100%)

●Specifications

Items		Characteristic
		VA , VB
Operating temp. range		-55 to +105°C
Rated voltage range		2.5 to 25V·DC
Capacitance range		15 to 220μF
Capacitance tolerance		±20% (M)
Endurance	Test condition	105°C, rated voltage 1000Hrs.
	Capacitance	Within ±20% of initial value before test
	Leakage current	Not to exceed the initial specified value
	tan δ	Not to exceed 150% of initial specified value
Damp Heat	Test condition	60°C,90~95%RH, No Bias, 500Hrs.
	Capacitance	Within +50%-20% of initial value before test
	Leakage current	Not to exceed 300% of initial specified value
	tan δ	Not to exceed 200% of initial specified value
Failure Rate		0.5% / 1000Hrs. Max (60%CL)

●Recommended land pattern



[Unit: mm]

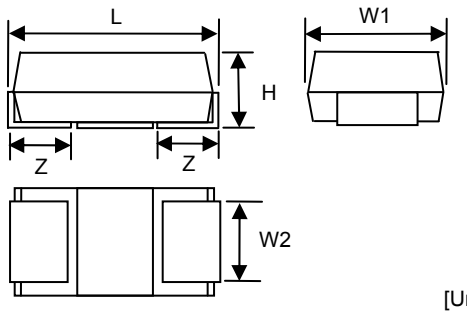
Size Code L × W × H	a	b	c
N 7.3 × 4.3 × 2.8	4.1	2.05	2.9

●Size Code (ESR) List

[Size Code (mΩ)]

R.V. (S.V.) [V] / Cap. [μF]	2.5 (2.8)		4.0 (4.6)		6.3 (7.2)		16 (18.4)	25 (28.7)
	VA	VB	VA	VB	VA	VB	VA	VA
15								N (60)
27							N (55)	
33							N (55)	
100					N (25)	N (20)		
150			N (18)	N (15)				
220	N (18)	N (15)						

●Dimensions



[Unit: mm]

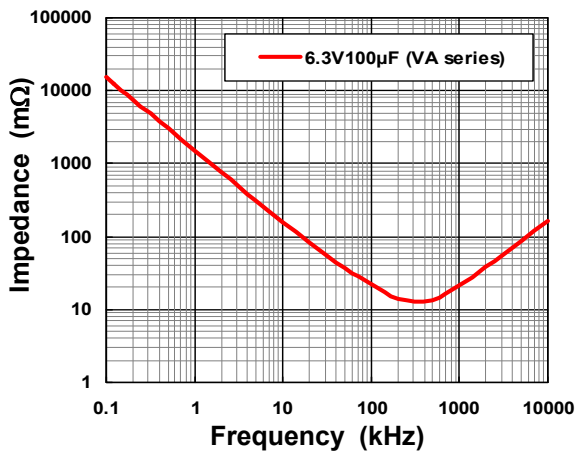
Size Code L × W × H	L±0.2	W1±0.2	W2±0.1	H±0.2	Z±0.2
N 7.3 × 4.3 × 2.8	7.3	4.3	2.4	2.8	1.3

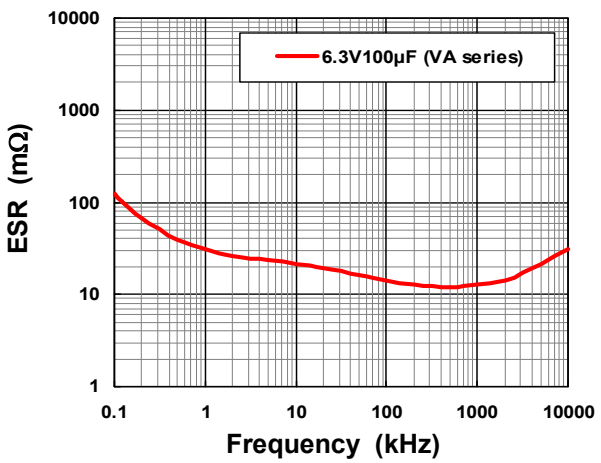
●Part number & Specifications

Rated Voltage (V)	Rated Capacitance (μF, 120Hz)	Part Number		Leakage Current* (μA, 2 min)	tanδ (120Hz)	ESR (mΩ, 100kHz)	Rated Ripple Current (mA, r.m.s.)	Size L×W×H(mm)	MSL (J-STD-020D)
		NICHICON	FPCAP						
2.5	220	RVA0E221MNG	FP-2R5CM221M-VAR	700	0.12	18	2600	7.3 × 4.3 × 2.8	Level 3
	220	RVB0E221MNG	FP-2R5CM221M-VBR	700	0.12	15	2800	7.3 × 4.3 × 2.8	Level 3
4.0	150	RVA0G151MNG	FP-4R0CM151M-VAR	700	0.12	18	2600	7.3 × 4.3 × 2.8	Level 3
	150	RVB0G151MNG	FP-4R0CM151M-VBR	700	0.12	15	2800	7.3 × 4.3 × 2.8	Level 3
6.3	100	RVA0J101MNG	FP-6R3CM101M-VAR	700	0.12	25	2000	7.3 × 4.3 × 2.8	Level 3
	100	RVB0J101MNG	FP-6R3CM101M-VBR	700	0.12	20	2400	7.3 × 4.3 × 2.8	Level 3
16	27	RVA1C270MNG	FP-016CM270M-VAR	216	0.12	55	1100	7.3 × 4.3 × 2.8	Level 3
	33	RVA1C330MNG	FP-016CM330M-VAR	264	0.12	55	1100	7.3 × 4.3 × 2.8	Level 3
25	15	RVA1E150MNG	FP-025CM150M-VAR	188	0.12	60	1000	7.3 × 4.3 × 2.8	Level 3

* In case of some doubt about measured values, measure after applying rated voltage for 120 minutes at 105°C.

●Frequency Characteristics





●Part Number (EX) 6.3V, 100μF, VA series

Nichicon P/N

R	VA	0J	101	M	N	G	
Type	Series name	Rated Voltage	Rated Capacitance	Capacitance Tolerance	Size Code (N: 7.3×4.3×2.8)	Taping code	Control code

FPCAP P/N

FP	—	6R3	CM	101	M	—	VA	R	
Commodity Mark		Rated Voltage	Classification	Rated Capacitance	Capacitance Tolerance		Series name	Taping code	Control code