

CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

UA/UB/UC series



For SMD



Smaller


High Ripple
Current


Low Impedance


For High
Frequency

FPCAP NEW

Resin-molded Chip, Low-Profile ($7.3 \times 4.3 \times 1.9$)

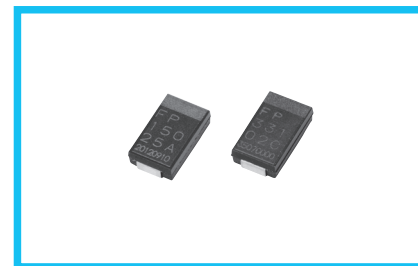
- By using Functional Polymer cathode, Frequency & Temp. characteristics are greatly improved.
- Low ESR at a high frequency range. ● High ripple current capability.

Applications

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

Environmental Correspondence

Compliant to the RoHS directive
(2011/65/EU).
The Lead-free of terminal plating.



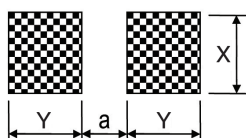
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	2.0 to 35V	
Rated Capacitance Range	12 to 330μF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Tangent of loss angle (tan δ)	Less than or equal to the specified value at 120Hz, 20°C	
ESR (※1)	Less than or equal to the specified value at 100kHz, 20°C	
Leakage Current (※2)	Less than or equal to the specified value. After 2 minutes' application of rated voltage at 20°C	
Endurance	Test condition	105°C, rated voltage 1000Hrs.
	Capacitance change	Within ±20% of initial value before test
	tan δ	150% or less than the initial specified value
	Leakage current (※2)	Less than or equal to the initial specified value
Damp Heat (Steady State)	Test condition	60°C, 90 to 95%RH, No Bias, 500Hrs.
	Capacitance change	Within +50% to -20% of initial value before test
	tan δ	200% or less than the initial specified value
	Leakage current (※2)	300% or less than the initial specified value
Failure Rate	0.5% / 1000Hrs. Max. (60%CL)	

※1 ESR should be measured at both of the terminal ends closest to the capacitor body.

※2 Conditioning : If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.

Recommended land Size

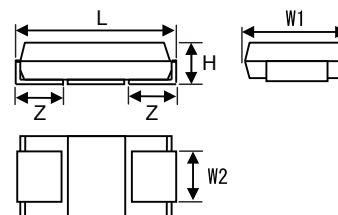


(mm)			
L × W × H	X	Y	a
7.3 × 4.3 × 1.9	2.9	2.05	4.1

Size Code (ESR)

[Upper value : Size Code, Lower value : ESR (mΩ)]

Cap [μF]	R.V.(V)			S.V.(V)			Series			Cap [μF]		
	2.0	4.0	6.3	16	25	35	UA	UB	UC	UA	UB	UA
12												L (70)
15												L (70) L (40)
27												L (65) L (40)
100												L (25) L (15)
150												L (18) L (15)
220	L (15)	L (9)										
270		L (9)	L (6)									
330		L (9)	L (6)									



(mm)					
Size Code	L±0.2	W1±0.2	W2±0.1	H±0.1	Z±0.2
L	7.3	4.3	2.4	1.9	1.3

※ Mass Production Plan : Dec. 2013

Design, Specifications are subject to change without notice.

NICHICON CORPORATION

ALUMINUM ELECTROLYTIC CAPACITORS

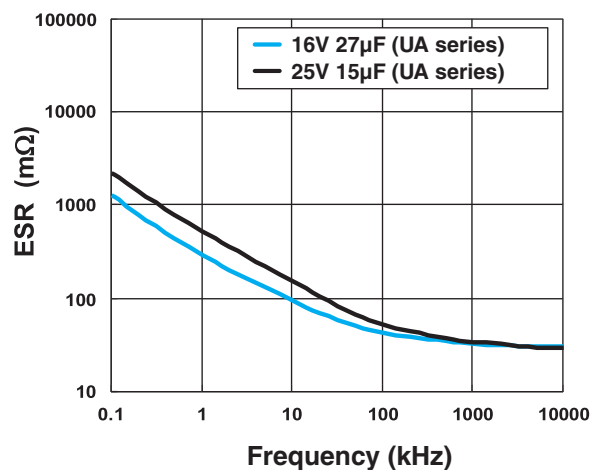
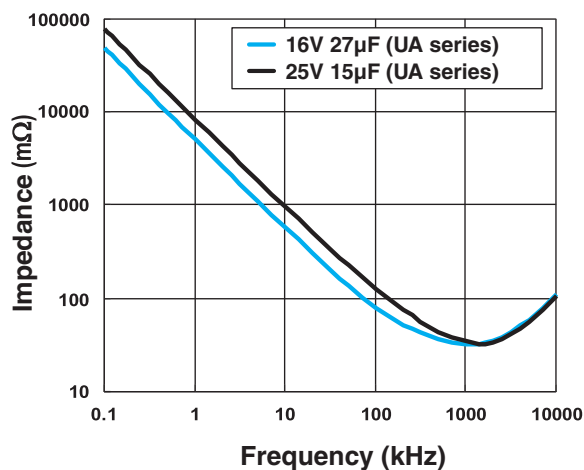
UA / UB / UC series

Standard Ratings

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μ F)	Case Size L×W×H (mm)	$\tan \delta$	Leakage Current (μ A, 2min.)	ESR (m Ω , 100kHz)	Rated Ripple Current (mA rms)	NICHICON	FPCAP	MSL (J-STD-020D)
2.0 (OD)	2.3	220	7.3×4.3×1.9	0.12	700	15	2800	RUA0D221MLG	FP-2R0CM221M-UAR	Level 3
		220	7.3×4.3×1.9	0.12	700	9	3300	RUB0D221MLG	FP-2R0CM221M-UBR	Level 3
		270	7.3×4.3×1.9	0.12	700	9	3300	RUB0D271MLG	FP-2R0CM271M-UBR	Level 3
		270*	7.3×4.3×1.9	0.12	700	6	3500	RUC0D271MLG	FP-2R0CM271M-UCR	Level 3
		330	7.3×4.3×1.9	0.12	700	9	3300	RUB0D331MLG	FP-2R0CM331M-UBR	Level 3
		330*	7.3×4.3×1.9	0.12	700	6	3500	RUC0D331MLG	FP-2R0CM331M-UCR	Level 3
4.0 (OG)	4.6	150	7.3×4.3×1.9	0.12	700	18	2600	RUA0G151MLG	FP-4R0CM151M-UAR	Level 3
6.3 (OJ)	7.2	100	7.3×4.3×1.9	0.12	700	25	2300	RUA0J101MLG	FP-6R3CM101M-UAR	Level 3
		100	7.3×4.3×1.9	0.12	700	15	2800	RUB0J101MLG	FP-6R3CM101M-UBR	Level 3
		150	7.3×4.3×1.9	0.12	1000	15	2800	RUB0J151MLG	FP-6R3CM151M-UBR	Level 3
16 (1C)	18.4	27	7.3×4.3×1.9	0.12	216	65	1100	RUA1C270MLG	FP-016CM270M-UAR	Level 3
		27	7.3×4.3×1.9	0.12	216	40	1400	RUB1C270MLG	FP-016CM270M-UBR	Level 3
25 (1E)	28.7	15	7.3×4.3×1.9	0.12	188	70	1000	RUA1E150MLG	FP-025CM150M-UAR	Level 3
		15	7.3×4.3×1.9	0.12	188	40	1400	RUB1E150MLG	FP-025CM150M-UBR	Level 3
35 (1V)	40.2	12	7.3×4.3×1.9	0.12	210	70	1000	RUA1V120MLG	FP-035CM120M-UAR	Level 3

※ Mass Production Plan : Dec. 2013.

Frequency Characteristics (The frequency characteristics are typical and not a guaranteed value.)



Design, Specifications are subject to change without notice.

NICHICON CORPORATION