

FPCAP Functional Polymer Aluminum Solid Electrolytic Capacitors

HS & HA series

Large Capacitance	Low ESR	φ8
SMD	Lead-free	RoHS Compliance



Features

By using Functional Polymer cathode, Frequency & Temp. characteristics are greatly improved.

- Low ESR at a high frequency range.
- High ripple current capability.
- Long life and high reliability.

Applications

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

Environmental Correspondence

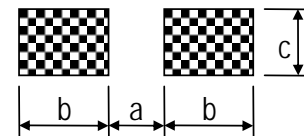
Corresponding to Lead-free, RoHS compliance and Halogen-free.

- The Lead-free of terminal plating (Sn)

Specifications

Items		Characteristic
		HS, HA
Operating temp. range		-55 to +105°C
Rated voltage range		2.5 to 35V-DC
Capacitance range		100 to 1500μF
Capacitance tolerance		±20% (M)
Endurance	Test condition	105°C, rated voltage 2000Hrs.
	Capacitance	Within ±20% of initial value before test
	Leakage current	Not to exceed the initial specified value
	ESR	Not to exceed 150% of initial specified value
	tan δ	Not to exceed 150% of initial specified value
Failure Rate		0.5% / 1000Hrs. Max (60%CL)

Recommended land pattern



[Unit: mm]

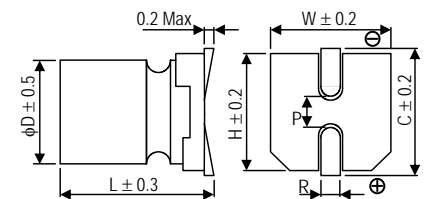
φD	a	b	c
8	2.8	4.2	1.9

Size (ESR) List

[φD×L (mΩ)]

R.V. (S.V.) [V]	2.5 (2.8)		4.0 (4.6)		6.3 (7.2)		10 (11.5)		16 (18.4)		20 (23.0)		25 (28.7)		35 (40.2)	
	HS	HA	HS	HA	HS	HA	HS	HA	HS	HA	HS	HS	HS	HS	HS	
100														8×8.7 (25)	8×8.7 (25)	
150								8×6.7 (25)	8×6.7 (22)							
270									8×6.7 (22)							
330							8×6.7 (9)	8×7.7 (19)								
390					8×6.7 (18)	8×6.7 (9)					8×11.7 (14)					
470						8×6.7 (9)										
560			8×6.7 (16)	8×6.7 (8)		8×7.7 (9)										
680		8×6.7 (8)		8×7.7 (8)												
820	8×11.7 (9)	8×6.7 (8)			8×11.7 (10)											
1000		8×7.7 (8)			8×11.7 (10)											
1200			8×11.7 (9)													
1500	8×11.7 (9)		8×11.7 (12)													

Dimensions



[Unit: mm]

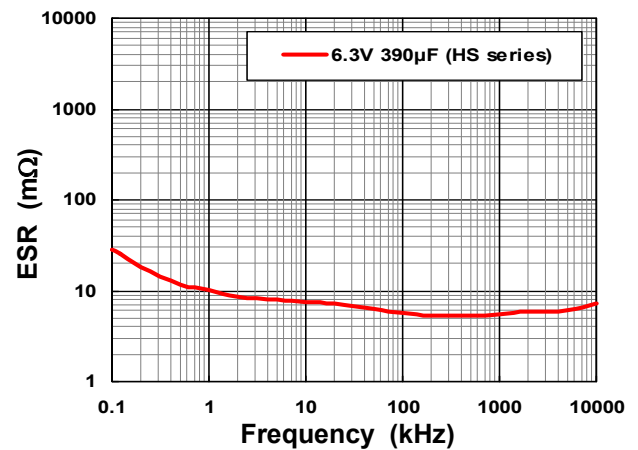
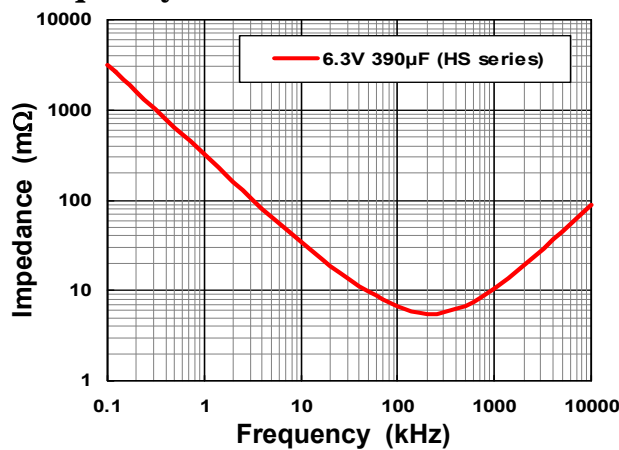
φD×L	W	H	C	R	P
8×6.7	8.3	8.3	9.0	0.8 to 1.1	3.2
8×7.7	8.3	8.3	9.0	0.8 to 1.1	3.2
8×8.7	8.3	8.3	9.0	0.8 to 1.1	3.2
8×11.7	8.3	8.3	9.0	0.8 to 1.1	3.2

● 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.)	Case Size φD×L(mm)
		NICHICON	FPCAP					
2.5	680	RHA0E681MCN1GS	FP-2R5ME681M-HAR	700	0.12	8	5000	8 × 6.7
	820	RHS0E821MCN1GS	FP-2R5ME821M-HSR	700	0.12	9	5400	8 × 11.7
	820	RHA0E821MCN1GS	FP-2R5ME821M-HAR	700	0.12	8	5000	8 × 6.7
	1000	RHA0E102MCN1GS	FP-2R5ME102M-HAR	750	0.12	8	5000	8 × 7.7
	1500	RHS0E152MCN1GS	FP-2R5ME152M-HSR	1125	0.12	9	5400	8 × 11.7
4.0	560	RHS0G561MCN1GS	FP-4R0ME561M-HSR	700	0.12	16	3200	8 × 6.7
	560	RHA0G561MCN1GS	FP-4R0ME561M-HAR	700	0.12	8	5000	8 × 6.7
	680	RHA0G681MCN1GS	FP-4R0ME681M-HAR	816	0.12	8	5000	8 × 7.7
	1200	RHS0G122MCN1GS	FP-4R0ME122M-HSR	1440	0.12	9	5400	8 × 11.7
	1500	RHS0G152MCN1GS	FP-4R0ME152M-HSR	1800	0.12	12	4700	8 × 11.7
6.3	330	RHA0J331MCN1GS	FP-6R3ME331M-HAR	700	0.12	9	4500	8 × 6.7
	390	RHS0J391MCN1GS	FP-6R3ME391M-HSR	737	0.12	18	3200	8 × 6.7
	390	RHA0J391MCN1GS	FP-6R3ME391M-HAR	737	0.12	9	4500	8 × 6.7
	470	RHA0J471MCN1GS	FP-6R3ME471M-HAR	888	0.12	9	4500	8 × 6.7
	560	RHA0J561MCN1GS	FP-6R3ME561M-HAR	1058	0.12	9	4500	8 × 7.7
	820	RHS0J821MCN1GS	FP-6R3ME821M-HSR	1550	0.12	10	5150	8 × 11.7
	1000	RHS0J102MCN1GS	FP-6R3ME102M-HSR	1890	0.12	10	5150	8 × 11.7
10	150	RHS1A151MCN1GS	FP-010ME151M-HSR	700	0.12	25	3000	8 × 6.7
	330	RHS1A331MCN1GS	FP-010ME331M-HSR	660	0.12	19	3390	8 × 7.7
16	150	RHA1C151MCN1GS	FP-016ME151M-HAR	700	0.12	22	3220	8 × 6.7
	270	RHA1C271MCN1GS	FP-016ME271M-HAR	864	0.12	22	3300	8 × 6.7
20	390	RHS1D391MCN1GS	FP-020ME391M-HSR	1560	0.12	14	4950	8 × 11.7
25	100	RHS1E101MCN1GS	FP-025ME101M-HSR	700	0.12	18	4000	8 × 8.7
35	100	RHS1V101MCN1GS	FP-035ME101M-HSR	700	0.12	25	3000	8 × 8.7

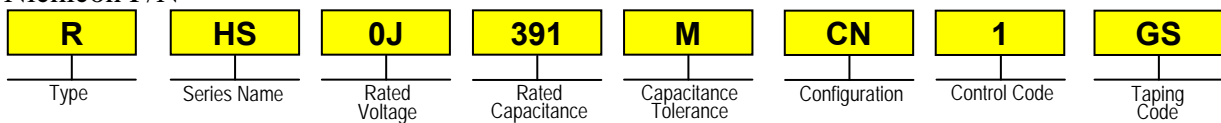
* In case of some doubt about measured values, measure after applying rated voltage for 120 minutes at 105°C.

● Frequency Characteristics



● Part Number (EX) 6.3V, 390μF, HS series

Nichicon P/N



FPCAP P/N

