NIPPON CHEMI-CON

SOLID ELECTROLYTIC CAPACITORS WITH ORGANIC SEMICONDUCTOR

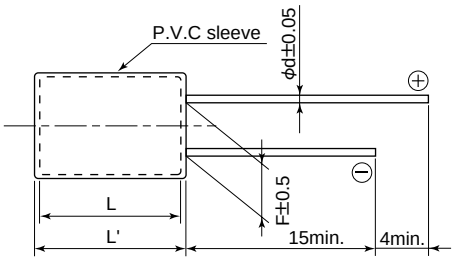
FA Series (Standard)

- 105℃, 2000 hours
- Low impedance at high frequency and high ripple current capability
- Suitable for switching power supplies and noise filter

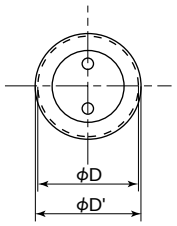
◆SPECIFICATIONS

Items	Performance Requirements			
Category Temperature Range	–55 to +105℃			
Rated Voltage Range	4 to 25Vdc			
Rated Capacitance Range	15 to 330μF			(at 20℃, 120Hz)
Tolerance on Rated Capacitance	±20% (M), ±10% (K)			(at 20℃, 120Hz)
Leakage Current	See STANDARD RATINGS table			(at 20℃, 2 min)
Dissipation Factor (tanδ)	See STANDARD RATINGS table			(at 20℃, 120Hz)
Characteristics at High and Low Temperature	Z (–55℃) / Z (20℃) Z (–40℃) / Z (20℃) Z (105℃) / Z (20℃)	0.75 to 1.25		(at 100Hz)
Endurance	After 2000hours with applying rated voltage at 105℃, shall not exceed or within the following values at 20℃. (20V shall be apllied for item of rated voltage 25V.)			
	Capacitance change	Within ±20% of the initial value		
	tanδ	1.5 times of the initial specified value		
	Leakage current	The initial specified value		
Dump Heat, Steady State	After 1000hours with no load at 60℃, 90 to 95%RH, shall not exceed or within the following values at 20℃. (after voltage treatment)			
	Capacitance change	Within ±10% of the initial value		
	tanδ Except 10×5	1.5 times of the initial specified value		
	tanδ 10×5	2.0 times the initial specified value		
	Leakage current	The initial specified value		

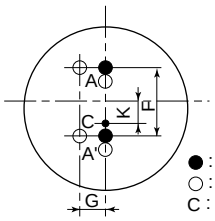
◆DIMENSIONS



L' = (L+1) max.



φD' = (φD+0.5) max.



● : Standard position of lead terminal
○ : Actual position of lead terminal
C : The middle point between position A - A'

(mm)

φD	6.3	8	10	
L	9.8	10.5	5	10.5
F	2.5	3.5	5.0	
φd	0.5	0.6	0.5	0.6
G max.	0.5			
K max.	0.5			

◆PART NUMBERING SYSTEM

6	FA	150	M	–	□
Rated voltage code	Series	Rated capacitance code	Torerance on rated capacitance		Supplement code

Voltage	Code
4	4
6.3	6
10	10
16	16
20	20
25	25

Capacitance	Code
33	33
100	100
330	330

For lead configuration, taping and etc.

CAT. No. E1002C

SOLID ELECTROLYTIC CAPACITORS WITH ORGANIC SEMICONDUCTOR

FA Series

◆STANDARD RATINGS

Part No.	Rated voltage (Vdc)	Rated capacitance (μF) 1)	Max ESR (mΩ) 2)	Rated ripple current (mA rms) 3)	Max tanδ	Max leakage current (μA) 4)	Case size φD×L (mm)
4FA220MA	4	220	55	2,400	0.07	17.6	10×5
6FA150M	6.3	150	30	2,780	0.07	18.9	8×10.5
6FA150MA	6.3	150	60	2,100	0.07	18.9	10×5
6FA330M	6.3	330	25	3,500	0.07	41.5	10×10.5
10FA47M	10	47	60	2,020	0.06	4.7	6.3×9.8
10FA68M	10	68	50	2,040	0.07	13.6	6.3×9.8
10FA100M	10	100	30	2,680	0.07	20.0	8×10.5
10FA100MA	10	100	60	2,100	0.07	20.0	10×5
10FA220M	10	220	27	3,370	0.07	44.0	10×10.5
16FA47M	16	47	60	1,830	0.06	15.0	6.3×9.8
16FA68M	16	68	40	2,600	0.06	21.7	8×10.5
16FA68MA	16	68	65	1,850	0.07	21.7	10×5
16FA100M	16	100	30	2,740	0.06	32.0	8×10.5
16FA150M	16	150	28	3,260	0.06	48.0	10×10.5
20FA33M	20	33	70	1,710	0.06	13.2	6.3×9.8
20FA47M	20	47	40	2,450	0.06	18.8	8×10.5
20FA68M	20	68	36	2,600	0.06	27.2	8×10.5
20FA100M	20	100	30	3,210	0.06	40.0	10×10.5
25FA15M	25	15	70	1,650	0.04	3.7	6.3×9.8
25FA22M	25	22	40	2,330	0.06	5.5	8×10.5
25FA22MA	25	22	70	1,600	0.07	11.0	10×5
25FA33M	25	33	35	2,900	0.06	8.2	10×10.5
25FA47M	25	47	35	2,980	0.06	11.7	10×10.5

Note 1) Tolerance on rated capacitance ±20%(M), ±10%(K)
2) ESR : 100kHz to 300kHz
3) Rated ripple current : 100kHz, 45℃
4) Max. leakage current : After 2 minutes.

◆CASE SIZE

μF \ Vdc	4	6.3	10	16	20	25
15						6.3×9.8
22						8×10.5
						10×5
33					6.3×9.8	10×10.5
47			6.3×9.8	6.3×9.8	8×10.5	10×10.5
68			6.3×9.8	8×10.5	8×10.5	
				10×5		
100			8×10.5	8×10.5	10×10.5	
			10×5			
150		8×10.5		10×10.5		
		10×5				
220	10×5		10×10.5			
330		10×10.5				

◆TEMPERATURE MULTIPLYING FACTOR OF RATED RIPPLE CURRENT

Ambient temperature (℃)	to +45	to +65	to +85	to +95	to +105
Multiplying factor	1	0.85	0.7	0.4	0.25

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