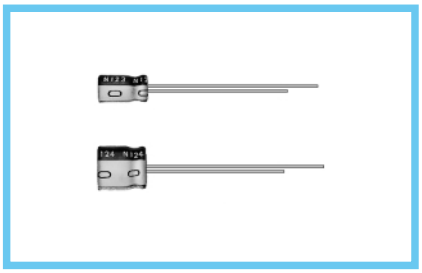
ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

SF 7mmL, Low Impedance series

Low Impedance Anti-Solvent Feature

- Low impedance over wide temperature range of −55 to +105°C, with 7mm height.
- Adapted to the RoHS directive (2002/95/EC).



SF — Low Impedance — ST

■Specifications

Item	Performance Characteristics
Category Temperature Range	−55 to +105°C
Rated Voltage Range	6.3 to 35V
Rated Capacitance Range	6.8 to 220μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3(μA), whichever is greater.
tan δ	Measurement frequency : 120Hz, Temperature : 20°C

Rated voltage (V)	6.3	10	16	25	35
tan δ (MAX.)	0.18	0.16	0.14	0.12	0.12

Stability at Low Temperature		Measurement frequency : 120Hz				
Rated voltage (V)		6.3	10	16	25	35
Impedance ratio	Z−25°C / Z+20°C	2	2	2	2	2
ZT / Z20 (MAX.)	Z−55°C / Z+20°C	3	3	3	3	3

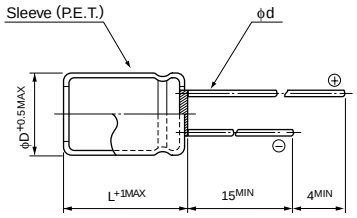
Endurance

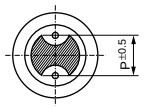
After 1000 hours' application of rated voltage at 105°C, capacitors meet the characteristic requirements listed at right.

Capacitance change	Within ±20% of initial value
tan δ	200% or less of initial specified value
Leakage current	Initial specified value or less

Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the specified value for endurance characteristics listed above.
Marking	Printed with white color letter on dark brown sleeve.

■Radial Lead Type





(mm)

φD	4	5	6.3	8
P	1.5	2.0	2.5	3.5
φd	0.45	0.45	0.45	0.5

Type numbering system (Example : 10V 33μF)

1	2	3	4	5	6	7	8	9	10	11
U	S	F	1	A	3	3	0	M	D	D

- Configuration※
- Capacitance tolerance (±20%)
- Rated Capacitance (33μF)
- Rated voltage (10V)
- Series name
- Type

※Configuration

φD	Pb-free leadwire Pb-free PET sleeve
4 to 8	DD

■Dimensions

Cap.(μF) \ V	6.3			10			16			25			35		
Code	0J			1A			1C			1E			1V		
6.8	6R8												4×7	3.3	70
10	100									4×7	3.3	70	5×7	1.7	110
15	150						4×7	3.3	70	5×7	1.7	110	6.3×7	0.8	160
22	220				4×7	3.3	70	5×7	1.7	110	5×7	1.7	110	6.3×7	0.8	160
33	330	5×7	1.7	110	5×7	1.7	110	6.3×7	0.8	160	6.3×7	0.8	160	8×7	0.5	200
47	470	5×7	1.7	110	6.3×7	0.8	160	6.3×7	0.8	160	8×7	0.5	200			
68	680	6.3×7	0.8	160	6.3×7	0.8	160	8×7	0.5	200	8×7	0.5	200			
100	101	6.3×7	0.8	160	8×7	0.5	200	8×7	0.5	200						
150	151	8×7	0.5	200	8×7	0.5	200							Case size φD×L (mm)	Impedance	Rated ripple
220	221	8×7	0.5	200												

Max. Impedance (Ω) at 20°C 100kHz
Rated Ripple (mArms) at 105°C 100kHz

- Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
Coefficient	0.35	0.50	0.64	0.83	1.00

Please refer to page 20, 21, 22 about the formed or taped product spec.
Please refer to page 4 for the minimum order quantity.