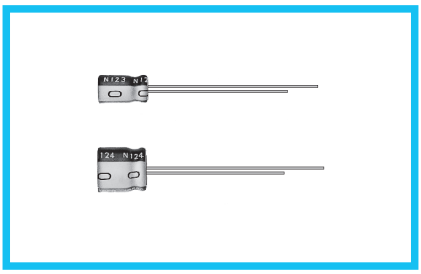
nichicon

USF

7mmL, Low Impedance

Low Impedance Anti-Solvent Feature

- Low impedance over wide temperature range of −55 to +105˚C, with 7mm height.
- Compliant to the RoHS directive (2011/65/EU).



USF ← Low Impedance → UST

■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 at 20°C, leakage current is not more than 0.01CV or 3(μA), whichever is greater.
Tangent of loss angle (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

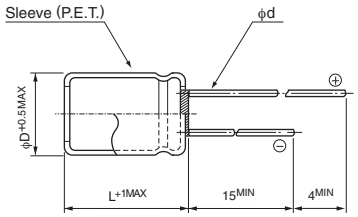
Rated voltage (V)		6.3	10	16	25	35
Impedance ratio	Z−25˚C / Z+20˚C	2	2	2	2	2
ZT / Z20 (MAX.)	Z−55˚C / Z+20˚C	3	3	3	3	3

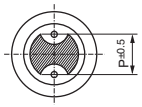
Endurance — The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 105°C.

Capacitance change	Within ±20% of the initial capacitance value
tan δ	200% or less than the initial specified value
Leakage current	Less than or equal to the initial specified value

Shelf Life	After storing the capacitors under no load at 105˚C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the 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

- 11: Configuration ※
- 9: Capacitance tolerance (±20%)
- 6–8: Rated capacitance (33 μF)
- 4–5: Rated voltage (10V)
- 2–3: Series name
- 1: Type

※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
4 to 8	DD

■Dimensions

Cap.(μF) \ V	Code	6.3			10			16			25			35		
		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)	Impe-dance	Rated ripple
220	221	8 × 7	0.5	200												

Max. Impedance (Ω) at 20˚C 100kHz
Rated ripple current (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.