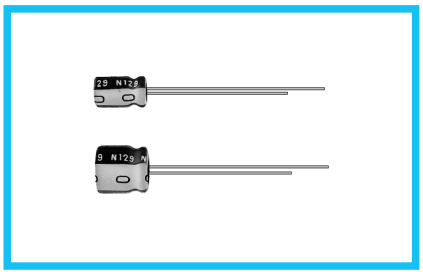
ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

ST 7mmL, Wide Temperature Range series

Anti-Solvent Feature

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



ST

High Temperature

SA

■Specifications

Item	Performance Characteristics
Category Temperature Range	−55 to +105˚C
Rated Voltage Range	6.3 to 50V
Rated Capacitance Range	0.1 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 at 20˚C

Rated voltage (V)	6.3	10	16	25	35	50
tan δ (MAX.)	0.24	0.21	0.18	0.15	0.13	0.12

Stability at Low Temperature — Measurement frequency : 120 Hz

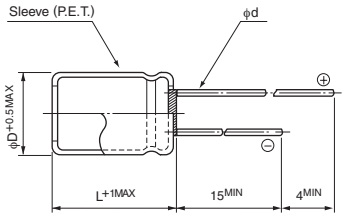
Rated voltage (V)		6.3	10	16	25	35	50
Impedance ratio	Z−25˚C / Z+20˚C	3	2	2	2	2	2
ZT / Z20 (MAX.)	Z−40˚C / Z+20˚C	6	5	4	3	3	3

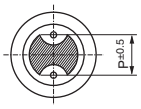
Endurance — The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 105°C.

Capacitance change	Within ±25% of the initial capacitance value (16Vor less) Within ±20% of the initial capacitance value (25Vor more)
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 black 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	T	1	A	3	3	0	M	D	D

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

※Configuration

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

■Dimensions

Cap.(μF) \ V	6.3		10		16		25		35		50	
Code	0J		1A		1C		1E		1V		1H	
0.1	0R1										4 × 7	1.0
0.22	R22										4 × 7	2.3
0.33	R33										4 × 7	3.5
0.47	R47										4 × 7	5.0
1	010										4 × 7	10
2.2	2R2										4 × 7	19
3.3	3R3										4 × 7	24
4.7	4R7								4 × 7	24	5 × 7	29
10	100				4 × 7	29	5 × 7	33	5 × 7	36	6.3 × 7	44
22	220	4 × 7	34	5 × 7	38	5 × 7	44	6.3 × 7	51	6.3 × 7	57	8 × 7	65
33	330	5 × 7	42	5 × 7	47	6.3 × 7	57	6.3 × 7	63	8 × 7	72		
47	470	5 × 7	50	6.3 × 7	59	6.3 × 7	68	8 × 7	78				
100	101	6.3 × 7	77	8 × 7	96	8 × 7	107					Case size φD×L (mm)	Rated ripple
220	221	8 × 7	130	8 × 7	140								

Rated ripple current 120Hz

● Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
Coefficient	0.70	1.00	1.17	1.36	1.50

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