# ALUMINUM ELECTROLYTIC CAPACITORS

# nichicon



3.95mmL MAX. Chip Type, Wide Temperature Range



- Chip type with 3.95mmLMAX height. Operating over wide temperature range of -40 to +105°C.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU).
- AEC-Q200 compliant. Please contact us for details.





#### Specifications

Item	Performance Characteristics										
Category Temperature Range	-40 to +105°C										
Rated Voltage Range	6.3 to 50V										
Rated Capacitance Range	1 to 100µF										
Capacitance Tolerance	±20% at 120Hz, 20°C										
Leakage Current	After 2 minutes	application of ra	ated voltage	at 20°C, lea	ıkage cur	rent is no	t more th	an 0.01 (	CV or 3 (µA)	, whichever is greater.	
Tangent of loss angle (tan $\delta$ )	Rated voltage (V)		6.3	10	16	2	5	35	50	120Hz 20°C	
	tan δ (MAX.)		0.38	0.32	0.20	0.	16	0.14	0.14		
	Rated voltage (V)		6.3	10	16	2	5	35	50	120Hz	
Stability at Low Temperature	Impedance ratio ZT / Z20 (MAX.)	Z–25°C / Z+20°C	6	5	3	3	3 3 3		3		
remperature		Z–40°C / Z+20°C	10	10	6	e	6	4	4		
Endurance	capacitors are r	ns listed at right estored to 20°C ) hours at 105°C	after the rat		i	tan ð	ance cha e current	30	Within ±30% of the initial capacitance value 300% or less than the initial specified value 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.										
Resistance to soldering heat	maintained at 2	acitors are kept on a hot plate for 30 seconds, which is ed at 250°C. The capacitors shall meet the characteristic ents listed at right when they are removed from the plate and to 20°C.				tan δ Less		Less th	thin $\pm 10\%$ of the initial capacitance value as than or equal to the initial specified value as than or equal to the initial specified value		
Marking	Black print on th	ne case top.									

## Chip Type

# Type numbering system (Example : $16V \ 10\mu F$ )



### Dimensions

	V	6	.3	1	10	· ·	16	2	25	:	35	5	60
Cap. (µF)	Code	0	IJ	1	A	1	1C	1	E	1	IV	1	Н
1	010											4	5.4
2.2	2R2											4	9.6
3.3	3R3		i		i i		1		1		i	4	12
4.7	4R7		1					4	11	4	13	5	16
10	100					4	16	5	20	5	22	6.3	26
22	220	4	19	5	24	5	26	6.3	33	6.3	36		
33	330	5	26	5	30	6.3	35	6.3	42		1		1
47	470	5	32	6.3	40	6.3	44						
100	101	6.3	52									Case size	Rated ripple

Rated ripple current (mArms) at 105°C 120Hz

Taping specifications are given in page 23.

- Recommended land size soldering by reflow are
  - given in page 18,19.
- Please refer to page 3 for the minimum order quantity.

### • Frequency coefficient of rated ripple current

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