# ALUMINUM ELECTROLYTIC CAPACITORS

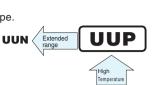
## nichicon



6mmL Chip Type, Bi-Polarized



- Chip type, bi-polarized withstanding high temperature range up 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.



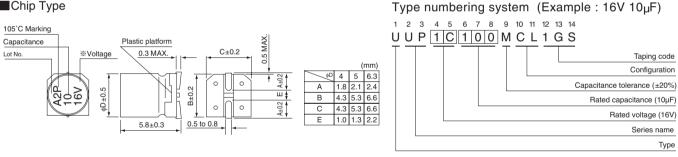
UWP



#### Specifications

Item	Performance Characteristics										
Category Temperature Range	−55 to +105°C										
Rated Voltage Range	6.3 to 50V										
Rated Capacitance Range	0.1 to 47µF										
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 0.05 CV or 10 (µA), whichever is greater.										
	Measurement frequency : 120Hz at 20°C										
Tangent of loss angle (tan $\delta$ )	Rated voltage (V) 6.3	10		16		25	5 35		50		
c,	tan δ (MAX.) 0.24 (	).20		0.17	0.17		0.15		0.15		
	Measurement frequency : 120Hz										
	Rated voltage (V)		6.3 10		16	6	25	35	50		
Stability at Low Temperature	Impedance ratio Z-25°C / Z+20°C	Z-25°C / Z+20°C		3	2		2	2	2		
	ZT / Z20 (MAX.) Z–40°C / Z+20°C		8	6	4		4	3	3		
	The specifications listed at right shall be met Capacitance change Within ±20% of the initial capacitance value										
Endurance	when the capacitors are restored to 20°C	δ 200% or less than the					· · · · · · · · · · · · · · · · · · ·				
	the rated voltage is applied for 1000 hours at 105°C with the polarity every 250 hours.										
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	The capacitors are kept on a hot plate	Са	Capacitance change Within ±10% of the initial capacitance value			nce value					
	maintained at 250°C. The capacitors shall meet the characteristic						tan δ		Less than or equal to the initial specified value		
	requirements listed at right when they a and restored to 20°C.	Leakage current		Less than or equal to the initial specified value							
Marking	Black print on the case top.										

### Chip Type



% Voltage mark for 6.3V is [6V]

### Dimensions

V		6.3		10		1	6	2	5	35		50	
Cap.(µF)	Code	0	J	1A 1C 1E		E	1V		1H				
0.1	0R1											4	1.0
0.22	R22											4	2.0
0.33	R33						 					4	2.8
0.47	R47						1					4	4.0
1	010											4	8.4
2.2	2R2									4	8.4	5	13
3.3	3R3						1	5	12	5	16	5	17
4.7	4R7					4	12	5	16	5	18	6.3	20
10	100			4	17	5	23	6.3	27	6.3	29		
22	220	5	28	6.3	33	6.3	37						
33	330	6.3	37	6.3	41	6.3	49						Rated
47	470	6.3	45				1					Case size	ripple

### Frequency coefficient of rated ripple current

	1 7					
[	Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
[	Coefficient	0.70	1.00	1.17	1.36	1.50

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 select UUN(p.166) if high CV products are required.

• Please refer to page 3 for the minimum order quantity.

