ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UUJ

Chip Type, Higher Capacitance Range

For SMD | Long Life | Anti-Solvent Feature (Through 100V only)

- Chip Type, higher capacitance in larger case sizes (φ12.5, φ16, φ18)
- 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,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

UUJ → Bi-Polarized → UUN

■Specifications

Item	Performance Characteristics		
Category Temperature Range	−55 to +105°C (6.3 to 100V), −40 to +105°C (160 to 450V)		
Rated Voltage Range	6.3 to 450V		
Rated Capacitance Range	3.3 to 6800μF		
Capacitance Tolerance	±20% at 120Hz, 20°C		
Leakage Current	Rated voltage (V)	6.3 to 100	160 to 450
	—	After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV or 4 (μA), whichever is greater.	I = 0.04CV+100 (μA) max. (1 minute's at 20°C)

Tangent of loss angle (tan δ) — Measurement frequency : 120Hz at 20°C

Rated voltage (V)	6.3	10	16	25	35	50	63	100	160 to 250	400・450
tan δ (MAX.)	0.26	0.22	0.18	0.16	0.14	0.12	0.10	0.08	0.15	0.20

For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF. (φ12.5 to φ18)

Stability at Low Temperature — Measurement frequency: 120Hz

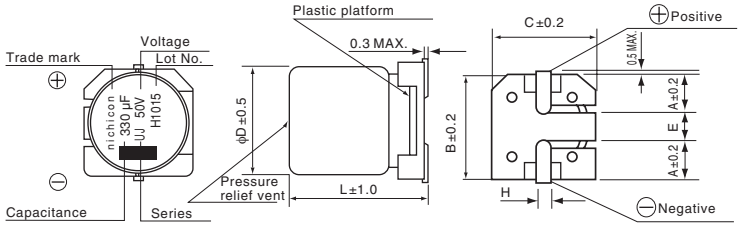
Rated voltage (V)		6.3	10	16	25	35	50	63	100	160 to 250	400・450
Impedance ratio (MAX.)	Z−25°C / Z+20°C	5	4	3	2	2	2	2	2	3	6
	Z−40°C / Z+20°C	10	8	6	4	3	3	3	3	6	10

Endurance — The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 5000 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	Black print on the case top.

■Chip Type



(mm)

φD	12.5×13.5	12.5×16	12.5×21	16×16.5	16×21.5	18×16.5	18×21.5
A	4.8	4.8	4.8	5.4	5.4	6.4	6.4
B	13.6	13.6	13.6	17.1	17.1	19.1	19.1
C	13.6	13.6	13.6	17.1	17.1	19.1	19.1
E	4.0	4.0	4.0	6.3	6.3	6.3	6.3
L	13.5	16.0	21.0	16.5	21.5	16.5	21.5
H	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4

Type numbering system (Example : 50V 330μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	U	J	1	H	3	3	1	M	N	Q	1	M	S

Package code
Size code
Configuration
Capacitance Tolerance (±20%)
Rated capacitance (330μF)
Rated voltage (50V)
Series name
Type

※ The vibration structure-resistant product is also available upon request, please ask for details.

● Frequency coefficient of rated ripple current

V	Cap.(μF) \ Frequency	50Hz	120Hz	300Hz	1kHz	10kHz or more
6.3 to 100	47 to 68	0.75	1.00	1.35	1.57	2.00
	100 to 470	0.80	1.00	1.23	1.34	1.50
	1000 to 6800	0.85	1.00	1.10	1.13	1.15
160 to 450	3.3 to 100	0.80	1.00	1.25	1.40	1.60

● Dimension table in next page.

UUJ

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L(mm)	tan δ	Leakage Current (μA) (at 20℃ after 1 minute)	Rated Ripple (mArms) (105℃/120Hz)	Part Number
6.3 (0J)	1000	12.5×13.5	0.26	189	440	UUJ0J102MNQ1MS
	2200	16×16.5	0.28	415.8	750	UUJ0J222MNQ1MS
	2200	12.5×21	0.28	415.8	750	UUJ0J222MNQ6MS
	3300	18×16.5	0.30	623.7	930	UUJ0J332MNQ1MS
	3300	16×21.5	0.30	623.7	930	UUJ0J332MNQ6MS
	4700	18×21.5	0.32	888.3	1100	UUJ0J472MNQ1MS
	6800	18×21.5	0.36	1285.2	1350	UUJ0J682MNQ6MS
10 (1A)	1000	12.5×16	0.22	300	500	UUJ1A102MNQ1MS
	2200	16×16.5	0.24	660	810	UUJ1A222MNQ1MS
	2200	12.5×21	0.24	660	810	UUJ1A222MNQ6MS
	3300	18×16.5	0.26	990	1000	UUJ1A332MNQ1MS
	3300	16×21.5	0.26	990	1000	UUJ1A332MNQ6MS
	4700	18×21.5	0.28	1410	1200	UUJ1A472MNQ1MS
	6800	18×21.5	0.32	2040	1450	UUJ1A682MNQ6MS
16 (1C)	470	12.5×13.5	0.18	225.6	360	UUJ1C471MNQ1MS
	1000	16×16.5	0.18	480	630	UUJ1C102MNQ1MS
	1000	12.5×21	0.18	480	630	UUJ1C102MNQ6MS
	2200	18×16.5	0.20	1056	930	UUJ1C222MNQ1MS
	2200	16×21.5	0.20	1056	930	UUJ1C222MNQ6MS
	3300	18×21.5	0.22	1584	1150	UUJ1C332MNQ1MS
25 (1E)	330	12.5×13.5	0.16	247.5	320	UUJ1E331MNQ1MS
	470	12.5×16	0.16	352.5	400	UUJ1E471MNQ1MS
	1000	18×16.5	0.16	750	700	UUJ1E102MNQ1MS
	1000	16×21.5	0.16	750	700	UUJ1E102MNQ6MS
	2200	18×21.5	0.18	1650	1050	UUJ1E222MNQ1MS
35 (1V)	220	12.5×13.5	0.14	231	280	UUJ1V221MNQ1MS
	330	12.5×16	0.14	346.5	360	UUJ1V331MNQ1MS
	470	16×16.5	0.14	493.5	490	UUJ1V471MNQ1MS
	470	12.5×21	0.14	493.5	490	UUJ1V471MNQ6MS
	1000	18×16.5	0.14	1050	750	UUJ1V102MNQ1MS
	1000	16×21.5	0.14	1050	750	UUJ1V102MNQ6MS
	2200	18×21.5	0.16	2310	1150	UUJ1V222MNQ6MS
50 (1H)	220	12.5×16	0.12	330	320	UUJ1H221MNQ1MS
	330	16×16.5	0.12	495	440	UUJ1H331MNQ1MS
	330	12.5×21	0.12	495	440	UUJ1H331MNQ6MS
	470	18×16.5	0.12	705	550	UUJ1H471MNQ1MS
	470	16×21.5	0.12	705	550	UUJ1H471MNQ6MS
	1000	18×21.5	0.12	1500	820	UUJ1H102MNQ1MS
63 (1J)	68	12.5×13.5	0.10	128.52	175	UUJ1J680MNQ1MS
	100	12.5×16	0.10	189	225	UUJ1J101MNQ1MS
	220	16×16.5	0.10	415.8	385	UUJ1J221MNQ1MS
	220	12.5×21	0.10	415.8	385	UUJ1J221MNQ6MS
	330	18×16.5	0.10	623.7	490	UUJ1J331MNQ1MS
	330	16×21.5	0.10	623.7	490	UUJ1J331MNQ6MS
	470	18×21.5	0.10	888.3	590	UUJ1J471MNQ1MS

UUJ

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20℃ after 1 minute)	Rated Ripple (mArms) (105℃/120Hz)	Part Number
100 (2A)	47	12.5×13.5	0.08	141	160	UUJ2A470MNQ1MS
	68	12.5×16	0.08	204	205	UUJ2A680MNQ1MS
	100	16×16.5	0.08	300	285	UUJ2A101MNQ1MS
	100	12.5×21	0.08	300	285	UUJ2A101MNQ6MS
	220	18×16.5	0.08	660	440	UUJ2A221MNQ1MS
	220	16×21.5	0.08	660	440	UUJ2A221MNQ6MS
	330	18×21.5	0.08	990	500	UUJ2A331MNQ6MS
160 (2C)	33	12.5×13.5	0.15	311.2	95	UUJ2C330MNQ1MS
	47	16×16.5	0.15	400.8	260	UUJ2C470MNQ1MS
	47	12.5×21	0.15	400.8	260	UUJ2C470MNQ6MS
	68	18×16.5	0.15	535.2	320	UUJ2C680MNQ1MS
	68	16×21.5	0.15	535.2	320	UUJ2C680MNQ6MS
	100	16×21.5	0.15	740	380	UUJ2C101MNQ1MS
200 (2D)	10	12.5×13.5	0.15	180	80	UUJ2D100MNQ1MS
	22	12.5×16	0.15	276	105	UUJ2D220MNQ1MS
	33	16×16.5	0.15	364	220	UUJ2D330MNQ1MS
	33	12.5×21	0.15	364	220	UUJ2D330MNQ6MS
	47	18×16.5	0.15	476	270	UUJ2D470MNQ1MS
	47	16×21.5	0.15	476	270	UUJ2D470MNQ6MS
	68	18×21.5	0.15	644	330	UUJ2D680MNQ1MS
	100	18×21.5	0.15	900	410	UUJ2D101MNQ6MS
250 (2E)	4.7	12.5×13.5	0.15	147	65	UUJ2E4R7MNQ1MS
	10	12.5×16	0.15	200	105	UUJ2E100MNQ1MS
	22	16×16.5	0.15	320	180	UUJ2E220MNQ1MS
	22	12.5×21	0.15	320	180	UUJ2E220MNQ6MS
	33	18×16.5	0.15	430	230	UUJ2E330MNQ1MS
	33	16×21.5	0.15	430	230	UUJ2E330MNQ6MS
	47	18×21.5	0.15	570	280	UUJ2E470MNQ1MS
	68	18×21.5	0.15	780	340	UUJ2E680MNQ6MS
400 (2G)	4.7	12.5×16	0.20	175.2	50	UUJ2G4R7MNQ1MS
	10	16×16.5	0.20	260	85	UUJ2G100MNQ1MS
	22	18×21.5	0.20	452	130	UUJ2G220MNQ1MS
	33	18×21.5	0.20	628	160	UUJ2G330MNQ6MS
450 (2W)	3.3	12.5×13.5	0.20	159.4	40	UUJ2W3R3MNQ1MS
	4.7	12.5×16	0.20	184.6	50	UUJ2W4R7MNQ1MS
	10	16×16.5	0.20	280	85	UUJ2W100MNQ1MS
	22	18×21.5	0.20	496	130	UUJ2W220MNQ1MS
	33	18×21.5	0.20	694	160	UUJ2W330MNQ6MS

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Nichicon:

UUJ2A331MRR1MS UUJ2A470MNR1MS UUJ2A680MNR1MS UUJ2C101MNR1MS UUJ2C330MNR1MS UUJ2C470MNR1MS UUJ2E4R7MNR1MS UUJ2W330MRR1ZD UUJ2W3R3MNR1MS UUJ1A222MNR1MS UUJ1C102MNR1MS UUJ1C222MNR1MS UUJ1C471MNR1MS UUJ1H221MNR1MS UUJ1H471MNR1MS UUJ1J101MNR1MS UUJ1J680MNR1MS UUJ1V102MNR1ZD UUJ1V221MNR1MS UUJ2A101MNR1MS UUJ2A101MNR6MS UUJ2A221MNR1MS UUJ2C330MNL1MS UUJ1A472MNL1MS UUJ1C102MNL1MS UUJ1C471MNL1MS UUJ1H471MNL1MS UUJ1V102MNL1MS UUJ1V222MRL1MS UUJ2A221MNL1ZD UUJ2D100MNL1MS UUJ2E4R7MNL1MS UUJ2W3R3MNL1MS UUG2W4R7MNQ1ZD UUJ0J102MNL1MS UUJ0J102MNL1ZD UUJ0J222MNL6MS UUJ0J222MNL6ZD UUJ0J222MNL1MS UUJ0J222MNL1ZD UUJ0J332MNL3MS UUJ0J332MNL3ZD UUJ0J332MNL6MS UUJ0J332MNL6ZD UUJ0J332MNL1ZD UUJ0J472MNL1MS UUJ0J472MNL1ZD UUJ0J472MRL6MS UUJ0J472MRL6ZD UUJ0J682MRL1MS UUJ0J682MRL1ZD UUJ1A102MNL1MS UUJ1A102MNL1ZD UUJ1A222MNLAZH UUJ1A222MNL6MS UUJ1A222MNL6ZD UUJ1A222MNL1MS UUJ1A222MNL1ZD UUJ1A332MNL6MS UUJ1A332MNL6ZD UUJ1A332MNL1MS UUJ1A332MNL1ZD UUJ1A472MNL1ZD UUJ1A682MRL1MS UUJ1A682MRL1ZD UUJ1C471MNL1ZD UUJ1C102MNL6MS UUJ1C102MNL6ZD UUJ1C102MNL1ZD UUJ1C222MNL6MS UUJ1C222MNL6ZD UUJ1C222MNL1ZD UUJ1C332MNL1MS UUJ1C332MNL1ZD UUJ1E331MNL1MS UUJ1E331MNL1ZD UUJ1E471MNL1MS UUJ1E471MNL1ZD UUJ1E102MNL1MS UUJ1E102MNL6MS UUJ1E102MNL6ZD UUJ1E102MNL1ZD UUJ1E222MNL1MS UUJ1E222MNL1ZD UUJ1V221MNL1MS UUJ1V221MNL1ZD UUJ1V331MNL1MS UUJ1V331MNL1ZD UUJ1V471MNL6MS UUJ1V471MNL6ZD UUJ1V471MNL1MS UUJ1V471MNL1ZD UUJ1V102MNL6MS UUJ1V102MNL6ZD UUJ1V102MNL1ZD UUJ1V222MRL1ZD UUJ1H221MNL1MS UUJ1H221MNL1ZD UUJ1H331MNL1MS UUJ1H331MNL6MS