nichicon

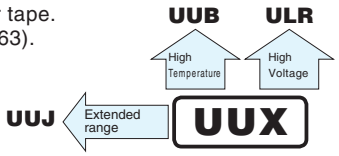
UUX

Chip Type, Wide Temperature Range

For SMD

Anti-Solvent Feature (Through 100V only)

- Chip type, operating over wide temperature range of to -55 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,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



■Specifications

Item	Performance Characteristics
Category Temperature Range	−55 to +105°C (6.3 to 100V), −40 to +105°C (160 to 400V)
Rated Voltage Range	6.3 to 400V
Rated Capacitance Range	1 to 1000μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	Rated voltage (V): 6.3 to 100 / 160 to 400 Leakage Current: After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV (μA). / 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	200	250	400
tan δ (MAX.)	0.22	0.19	0.16	0.14	0.12	0.10	0.10	0.08	0.20	0.20	0.20	0.25

Stability at Low Temperature — Measurement frequency: 120Hz

Rated voltage (V)		6.3	10	16	25	35	50	63	100	160	200	250	400
Impedance ratio ZT / Z20 (MAX.)	Z−55°C / Z+20°C	4	4	3	3	3	2	3	4	—	—	—	—
	Z−40°C / Z+20°C	—	—	—	—	—	—	—	—	6	6	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 2000 hours (160 to 400V : 3000hours) at 105°C.

Capacitance change	Within ±20% of the initial capacitance value
tan δ	200% or less than the intial 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.

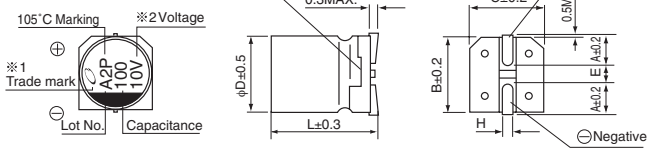
Resistance to soldering heat — The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C.

Capacitance change	Within ±10% of the initial capacitance value
tan δ	Less than or equal to the initial specified value
Leakage current	Less than or equal to the initial specified value

Marking — Black print on the case top.

■Chip Type

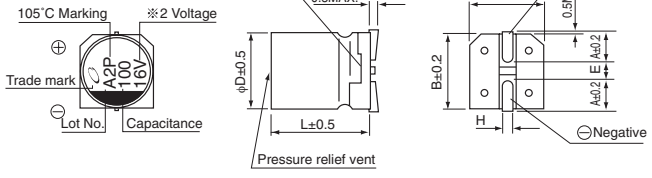
(φ6.3, φ8 × 6.2)



※1 Size φ8×6.2 only

※2 Voltage mark for 6.3V is「6V」.

(φ8 × 10, φ10)



● Dimension table in next page.

Type numbering system (Example : 10V 100μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	U	X	1	A	1	0	1	M	C	L	1	G	S

- 1 2 3: Type
- 4 5: Rated voltage (10V)
- 6 7 8: Rated capacitance (100μF)
- 9: Capacitance tolerance (±20%)
- 10 11: Configuration
- 12: Size code
- 13 14: Package code

D × L	Code
6.3 × 7.7	CL
8 × 6.2	CL
8 × 10	NL
10 × 10	NL

(mm)

φD × L	6.3 × 7.7	8 × 6.2	8 × 10	10 × 10
A	2.4	3.3	2.9	3.2
B	6.6	8.3	8.3	10.3
C	6.6	8.3	8.3	10.3
E	2.2	2.3	3.1	4.5
L	7.7	6.2	10	10
H	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1

UUX

■Dimensions

Cap. (μF) \ V	6.3		10		16		25		35		50		63		100	
Code	0J		1A		1C		1E		1V		1H		1J		2A	
4.7	4R7														8×6.2	42
10	100												8×6.2	51	8×10	75
22	220										○ 8×6.2	67(64)	8×10	108	■10×10	150(121)
33	330								○ 8×6.2	76(75)	8×10	133	■10×10	185(179)	10×10	180
47	470						○ 8×6.2	79(78)	8×10	124	■10×10	180(167)	10×10	220	10×10	230
100	101			8×6.2	90	○ 8×10	148(111)	8×10	181	■ 10×10	304(283)	10×10	310	10×10	320		
220	221	○ 8×10	161(121)	8×10	173	■ 10×10	330(307)	■10×10	351(283)	10×10	450						
330	331	8×10	288	■10×10	318(296)	■ 10×10	441(410)	10×10	372								
470	471	■ 10×10	340(316)	■10×10	351(326)	10×10	489										
680	681	10×10	408	10×10	392										Case size φD × L (mm)	Rated ripple
1000	102	10×10	495													

Cap. (μF) \ V	160		200		250		400	
Code	2C		2D		2E		2G	
1	010						8×10	25
1.8	1R8						8×10	26
2.2	2R2						8×10	27
3.3	3R3		8×10	31	8×10	31	10×10	38
3.9	3R9		8×10	34	8×10	34	10×10	39
4.7	4R7		8×10	37	8×10	37	10×10	40
6.8	6R8		8×10	44	8×10	44		
10	100	8×10	57	10×10	64	10×10	64		
18	180	10×10	64						

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

Size φ6.3 × 7.7 is available for capacitors marked. "○" / Size φ8 × 10 is available for capacitors marked. "■"
※ In this case, 6 will be put at 12th digit of type numbering system.

● Frequency coefficient of rated ripple current

Cap.(μF) \ Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
1 to 47	0.80	1.00	1.15	1.40	1.67
100 to 1000	0.85	1.00	1.08	1.20	1.30

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please select UUJ(p.176) if high C/V products are reqired.
- Please refer to page 3 for the minimum order quantity.

Mouser Electronics

Authorized Distributor

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

Nichicon:

UUX1C221MNR1GS UUX1C221MNT1GS UUX1C331MNR1GS UUX1C471MNR1GS UUX1E101MNR1GS
UUX1E221MNR1GS UUX1E331MNR1GS UUX1E470MBR1GS UUX1H220MBR1GS UUX1H330MNR1GS
UUX1H470MNR1GS UUX1H470MNT1GS UUX1J101MNR1GS UUX1J470MNR1GS UUX1V101MNR1GS
UUX1V101MNT1GS UUX1V221MNR1GS UUX1V470MNR1GS UUX2A330MNR1GS UUX2A470MNR1GS
UUX0J471MNR1GS UUX1A101MBR1GS UUX1A471MNR1GS UUX1C101MNR1GS UUX1H101MNL1GS
UUX2A330MNL1GS UUX1H470MNL1GS UUX1E101MNL1GS UUX1A471MNL1GS UUX1H330MNL1GS
UUX0J221MCL6GS UUX0J331MNL1GS UUX0J471MNL1GS UUX1A221MNL1GS UUX1A331MNL1GS
UUX1C101MNL1GS UUX1C221MNL1GS UUX1C471MNL1GS UUX1J101MNL1GS UUX1J330MNL1GS
UUX1V470MNL1GS UUX2A100MNL1GS UUX0J221MNL1GS UUX0J471MNL6GS UUX0J681MNL1GS
UUX0J102MNL1GS UUX1A101MCL1GS UUX1A331MNL6GS UUX1A471MNL6GS UUX1A681MNL1GS
UUX1C101MCL6GS UUX1C221MNL6GS UUX1C331MNL6GS UUX1E470MCL6GS UUX1E470MCL1GS
UUX1E221MNL6GS UUX1E331MNL1GS UUX1V330MCL6GS UUX1V330MCL1GS UUX1V101MNL6GS
UUX1V221MNL1GS UUX1H220MCL6GS UUX1H220MCL1GS UUX1H470MNL6GS UUX1J100MCL1GS
UUX1J220MNL1GS UUX1J470MNL6GS UUX2A4R7MCL1GS UUX2A220MNL6GS UUX2A220MNL1GS
UUX1J470MNL1GS UUX2A470MNQ1GS UUX0J331MNT1GS UUX0J471MNT1GS UUX1A221MNT1GS
UUX1A471MNT1GS UUX1C331MNL1GS UUX1C331MNT1GS UUX1E101MNT1GS UUX1E221MNL1GS
UUX1E221MNT1GS UUX1H101MNR1GS UUX1H470MNR6GS UUX1V101MNL1GS UUX1V470MNT1GS
UUX2A100MNR1GS UUX2A470MNL1GS UUX1E470MCR6GS UUX1J330MNL6GS UUX1C221MNL1MS
UUX2G4R7MNL1GS UUX2E4R7MNL1GS UUX2E100MNL1GS UUX2D3R3MNL1GS UUX2G3R9MNL1GS
UUX2E3R9MNL1GS UUX2D6R8MNL1GS UUX2C180MNL1GS UUX2D3R9MNL1GS UUX2G2R2MNL1GS