ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

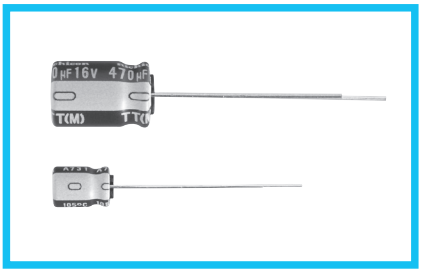
UTT

Miniature Sized, Low Impedance, High Reliability For Switching Power Supplies

Smaller | Low Impedance | Long Life | Anti-Solvent Feature

- Smaller case size and Long Life product.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

UPW → Long Life → UTT



■Specifications

Item	Performance Characteristics
Category Temperature Range	−40 to +105˚C
Rated Voltage Range	6.3 to 50V
Rated Capacitance Range	1 to 470µF
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 0.03CV 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.)	0.30	0.28	0.24	0.18	0.16	0.14

Stability at Low Temperature — Measurement frequency : 120Hz

Rated voltage (V)		6.3	10	16	25	35	50
Impedance ratio (MAX.)	Z−25°C / Z+20°C	5	4	3	3	3	3
	Z−40°C / Z+20°C	10	10	8	6	4	4

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 ±30% of the initial capacitance value
tan δ	300% or less than the initial specified value
Leakage current	Less than or equal to the initial specified value

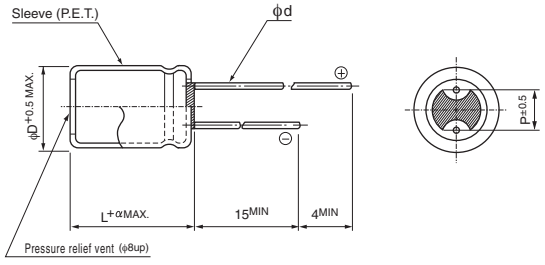
Shelf Life

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 dark blown sleeve.

■Radial Lead Type



α	(L = 7) 1.0
	(L ≧ 9) 1.5

(mm)

φD	4	5	6.3	8
P	1.5	2.0	2.5	3.5
φd	0.45	0.45	0.5 (0.45)	0.6

( ) : Applied to 7mmL products

• Please refer to page 18 about the end seal configuration.

Type numbering system (Example : 25V 100µF)

1	2	3	4	5	6	7	8	9	10	11
U	T	T	1	E	1	0	1	M	P	D

- 11: Configuration ※
- 10: Capacitance tolerance (±20%)
- 8–6: Rated capacitance (100µF)
- 5–4: Rated voltage (25V)
- 3: Series name
- 2–1: Type

※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
4 to 6.3	DD
8	PD

●Frequency coefficient of rated ripple current

Cap. (µF) \ Frequency	50Hz	120Hz	300Hz	1kHz	10kHz	100kHz or more
1 to 4.7	0.25	0.30	0.50	0.70	0.90	1.00
10 to 47	0.30	0.40	0.60	0.75	0.90	1.00
100 to 470	0.60	0.60	0.70	0.80	0.90	1.00

●Dimension table in next page.

UTT

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20℃ after 2 minutes)	Impedance (Ω) MAX. (20℃/100kHz)	Rated Ripple (mArms) (105℃/100kHz)	Part Number
6.3 (0J)	22	4×7	0.30	4.158	7.40	46	UTT0J220MDD
	47	5×7	0.30	8.883	4.00	74	UTT0J470MDD
	100	6.3×7	0.30	18.9	2.10	120	UTT0J101MDD
	220	6.3×9	0.30	41.58	1.10	163	UTT0J221MDD
	330	8×9	0.30	62.37	0.68	230	UTT0J331MPD
	470	8×9	0.30	88.83	0.68	230	UTT0J471MPD
10 (1A)	33	5×7	0.28	9.9	4.00	74	UTT1A330MDD
	150	6.3×9	0.28	45	1.10	163	UTT1A151MDD
	220	8×9	0.28	66	0.68	230	UTT1A221MPD
16 (1C)	10	4×7	0.24	4.8	7.40	46	UTT1C100MDD
	22	5×7	0.24	10.56	4.00	74	UTT1C220MDD
	47	6.3×7	0.24	22.56	2.10	120	UTT1C470MDD
	100	6.3×9	0.24	48	1.10	163	UTT1C101MDD
	150	8×9	0.24	72	0.68	230	UTT1C151MPD
	220	8×9	0.24	105.6	0.68	230	UTT1C221MPD
	330	8×9	0.24	158.4	0.68	230	UTT1C331MPD
	470	8×11.5	0.24	225.6	0.40	298	UTT1C471MPD
25 (1E)	22	5×7	0.18	16.5	4.00	74	UTT1E220MDD
	33	6.3×7	0.18	24.75	2.10	120	UTT1E330MDD
	47	6.3×9	0.18	35.25	1.10	163	UTT1E470MDD
	100	8×9	0.18	75	0.68	230	UTT1E101MPD
	220	8×11.5	0.18	165	0.40	298	UTT1E221MPD
	330	8×11.5	0.18	247.5	0.40	298	UTT1E331MPD
35 (1V)	4.7	4×7	0.16	4.935	7.40	37	UTT1V4R7MDD
	10	5×7	0.16	10.5	4.00	74	UTT1V100MDD
	22	6.3×7	0.16	23.1	2.10	120	UTT1V220MDD
	33	6.3×9	0.16	34.65	1.10	163	UTT1V330MDD
	47	6.3×9	0.16	49.35	1.10	163	UTT1V470MDD
50 (1H)	1	4×7	0.14	3	30.00	23	UTT1H010MDD
	2.2	4×7	0.14	3.3	23.00	26	UTT1H2R2MDD
	3.3	4×7	0.14	4.95	20.00	29	UTT1H3R3MDD
	4.7	5×7	0.14	7.05	14.00	37	UTT1H4R7MDD
	10	6.3×7	0.14	15	4.40	84	UTT1H100MDD
	22	6.3×9	0.14	33	2.40	112	UTT1H220MDD
	47	8×9	0.14	70.5	1.40	162	UTT1H470MPD

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).
If there is no size code in the part number, please add size code “1” and then add the appropriate code.

Please refer to page 18, 19 about the formed or taped product spec.
Please refer to page 4 for the minimum order quantity.

Mouser Electronics

Authorized Distributor

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

Nichicon:

UTT1C331MPD UTT1E470MDD UTT1H100MDD UTT1C221MPD UTT1V220MDD UTT0J221MDD UTT1H4R7MDD UTT1C470MDD UTT0J101MDD UTT1H3R3MDD UTT1H470MPD UTT1C220MDD UTT0J470MDD UTT1E220MDD UTT1V470MDD UTT1V330MDD UTT1H2R2MDD UTT1C471MPD UTT0J471MPD UTT0J331MPD UTT1H010MDD UTT1E330MDD UTT1V4R7MDD UTT1A151MDD UTT1A330MDD UTT1E221MPD UTT1H220MDD UTT0J220MDD UTT1E331MPD UTT1V100MDD UTT1A221MPD UTT1C100MDD UTT1C101MDD UTT1C151MPD UTT1E101MPD UTT1H220MDD1TD UTT1C151MPD1TD UTT1H2R2MDD1TP UTT1C470MDD1TP UTT0J331MPD1TD UTT1E220MDD1TP UTT0J221MDD1TD UTT1A151MDD1TD UTT0J471MPD1TD UTT1V330MDD1TD UTT1H470MPD1TD UTT1E330MDD1TP UTT1C100MDD1TP UTT1E221MPD1TD UTT1A330MDD1TP UTT1E101MPD1TD UTT1E331MPD1TD UTT1V4R7MDD1TP UTT1V470MDD1TD UTT1C471MPD1TD UTT1C101MDD1TD UTT0J101MDD1TP UTT1H3R3MDD1TP UTT1C331MPD1TD UTT1V220MDD1TP UTT1C221MPD1TD UTT1H100MDD1TP UTT1H010MDD1TP UTT0J220MDD1TP UTT1E470MDD1TD UTT1H4R7MDD1TP UTT1V100MDD1TP UTT1C220MDD1TP UTT0J470MDD1TP UTT1C471MPD1TA UTT1H4R7MDD1TE UTT1E101MPD1TA UTT1V330MDD1TA UTT0J331MPD1TA UTT1A221MPD1TD UTT1C101MDD1TA UTT1E221MPD1TA UTT1E331MPD1TA UTT1E470MDD1TA UTT1H010MDD1TE UTT1H220MDD1TA UTT1H2R2MDD1TE UTT1H470MPD1TA UTT1V470MDD1TA UTT1V220MDD1TE UTT1E330MDD1TE UTT1C100MDD1TE UTT1A151MDD1TA UTT0J221MDD1TA UTT0J471MPD1TA UTT1H100MDD1TE UTT1H3R3MDD1TE UTT0J101MDD1TE UTT1V100MDD1TE UTT1V4R7MDD1TE UTT0J220MDD1TE