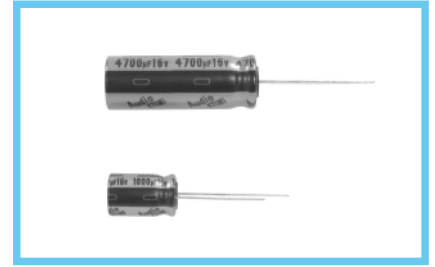


# ALUMINUM ELECTROLYTIC CAPACITORS

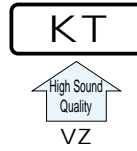
nichicon

NEW

**KT** For General Audio Equipment,  
Wide Temperature Range.  
series



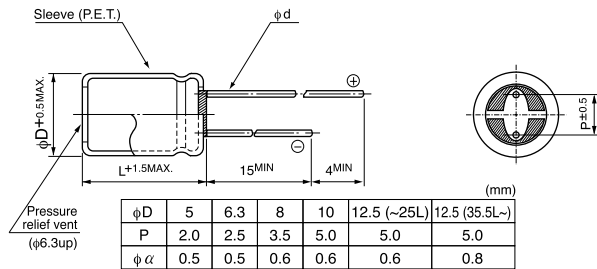
- 105°C standard for audio equipment.
- Adapted to the RoHS directive (2002/95/EC).



## Specifications

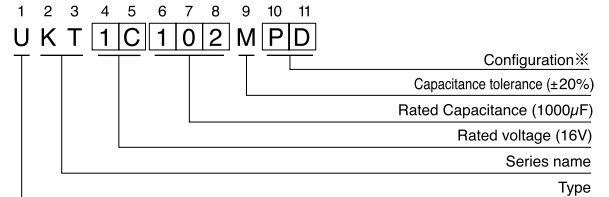
| Item  | Performance Characteristics  |  |   |
|---|--|--|---|
| Category Temperature Range  | -55 ~ +105°C   |  |   |
| Rated Voltage Range   | 6.3 ~ 50V  |  |   |
| Rated Capacitance Range   | 0.1 ~ 10000μF  |  |   |
| Capacitance Tolerance   | ±20% at 120Hz, 20°C  |  |   |
| Leakage Current   | After 1 minutes' application of rated voltage, leakage current is not more than 0.03CV or 4 (μA), whichever is greater.<br>After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (μA), whichever is greater. |  |   |
| tan δ   | Rated voltage (V)  | 6.3    10    16    25    35    50  |   |
|   | tan δ (MAX.)   | 0.30   0.26   0.22   0.18   0.16   0.14  |   |
| Measurement frequency : 120Hz, Temperature : 20°C<br>For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF |  |  |   |
| Stability at Low Temperature  | Rated voltage (V)  | 6.3    10    16    25    35    50  |   |
|   | Impedance ratio<br>ZT / Z20 (MAX.)   | Z-25°C / Z+20°C    5    4    3    2    2    2<br>Z-40°C / Z+20°C    10   8    6    4    3    3 |   |
| Measurement frequency : 120Hz   |  |  |   |
| Endurance   | After 1000 hours' application of rated voltage at 105°C, capacitors meet the characteristics requirement listed at right.  | Capacitance change   | Within ±20% of initial value            |
|   |  | tan δ  | 200% or less of initial specified value |
|   |  | Leakage current  | Initial specified value or less         |
| Shelf Life  | After storing the capacitors under no load at 105°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the specified value for endurance characteristics listed above.                |  |   |
| Marking   | Printed with black color letter on purl blue sleeve.   |  |   |

## Radial Lead Type



• Please refer to page 21 about the end seal configuration.

## Type numbering system (Example : 16V 1000μF)



| φ D    | Pb-free leadwire<br>Pb-free PET sleeve |
|--------|--|
| 5      | DD                                     |
| 6.3    | ED                                     |
| 8 · 10 | PD                                     |
| 12.5   | HD                                     |

## Dimensions

| Cap.(μF) | code | 6.3         |      | 10          |      | 16          |      | 25          |      | 35        |      | 50          |        |             |      |
|----------|------|-------------|------|-------------|------|-------------|------|-------------|------|-----------|------|-------------|--------|-------------|------|
|          |      | 0J          |      | 1A          |      | 1C          |      | 1E          |      | 1V        |      | 1H          |        |             |      |
| 0.1      | 0R1  |             |      |             |      |             |      |             |      |           |      |             | 5 × 11 | 1.3         |      |
| 0.22     | R22  |             |      |             |      |             |      |             |      |           |      |             | 5 × 11 | 2.9         |      |
| 0.33     | R33  |             |      |             |      |             |      |             |      |           |      |             | 5 × 11 | 4.3         |      |
| 0.47     | R47  |             |      |             |      |             |      |             |      |           |      |             | 5 × 11 | 7.0         |      |
| 1        | 010  |             |      |             |      |             |      |             |      |           |      |             | 5 × 11 | 13          |      |
| 2.2      | 2R2  |             |      |             |      |             |      |             |      |           |      |             | 5 × 11 | 20          |      |
| 3.3      | 3R3  |             |      |             |      |             |      |             |      |           |      |             | 5 × 11 | 25          |      |
| 4.7      | 4R7  |             |      |             |      |             |      |             |      |           |      |             | 5 × 11 | 30          |      |
| 10       | 100  |             |      |             |      |             |      | 5 × 11      | 35   | 5 × 11    | 36   | 5 × 11      | 41     | 5 × 11      | 46   |
| 22       | 220  | 5 × 11      | 45   | 5 × 11      | 45   | 5 × 11      | 54   | 5 × 11      | 58   | 5 × 11    | 61   | 5 × 11      | 61     | 5 × 11      | 68   |
| 33       | 330  | 5 × 11      | 55   | 5 × 11      | 58   | 5 × 11      | 65   | 5 × 11      | 68   | 5 × 11    | 75   | 5 × 11      | 75     | 5 × 11      | 90   |
| 47       | 470  | 5 × 11      | 65   | 5 × 11      | 68   | 5 × 11      | 79   | 5 × 11      | 83   | 5 × 11    | 93   | 6.3 × 11    | 93     | 6.3 × 11    | 115  |
| 100      | 101  | 5 × 11      | 95   | 5 × 11      | 105  | 5 × 11      | 115  | 6.3 × 11    | 140  | 6.3 × 11  | 150  | 8 × 11.5    | 150    | 8 × 11.5    | 190  |
| 220      | 221  | 6.3 × 11    | 160  | 6.3 × 11    | 175  | 6.3 × 11    | 190  | 8 × 11.5    | 240  | 8 × 11.5  | 260  | 10 × 12.5   | 260    | 10 × 12.5   | 300  |
| 330      | 331  | 6.3 × 11    | 195  | 8 × 11.5    | 240  | 8 × 11.5    | 265  | 8 × 11.5    | 290  | 10 × 12.5 | 350  | 10 × 16     | 350    | 10 × 16     | 410  |
| 470      | 471  | 8 × 11.5    | 270  | 8 × 11.5    | 280  | 8 × 11.5    | 315  | 10 × 12.5   | 380  | 10 × 16   | 460  | 12.5 × 20   | 460    | 12.5 × 20   | 530  |
| 1000     | 102  | 10 × 12.5   | 420  | 10 × 16     | 500  | 10 × 16     | 560  | 10 × 20     | 680  | 12.5 × 25 | 860  | 12.5 × 31.5 | 860    | 12.5 × 31.5 | 1040 |
| 2200     | 222  | 10 × 20     | 710  | 12.5 × 20   | 810  | 12.5 × 20   | 920  | 12.5 × 31.5 | 1200 | 12.5 × 40 | 1260 |             |        |             |      |
| 3300     | 332  | 12.5 × 20   | 910  | 12.5 × 25   | 1050 | 12.5 × 31.5 | 1270 | 12.5 × 35.5 | 1400 |           |      |             |        |             |      |
| 4700     | 472  | 12.5 × 25   | 1120 | 12.5 × 35.5 | 1300 | 12.5 × 35.5 | 1480 |             |      |           |      |             |        |             |      |
| 6800     | 682  | 12.5 × 35.5 | 1360 | 12.5 × 40   | 1570 |             |      |             |      |           |      |             |        |             |      |
| 10000    | 103  | 12.5 × 40   | 1650 |             |      |             |      |             |      |           |      |             |        |             |      |

Rated Ripple (mArms) at 105°C 120Hz

## Frequency coefficient of rated ripple current

| Cap.(μF)     | Frequency | 50Hz | 120Hz | 300Hz | 1kHz | 10kHz ~ |
|--------------|-----------|------|-------|-------|------|---------|
| ~ 47         |           | 0.75 | 1.00  | 1.35  | 1.57 | 2.00    |
| 100 ~ 470    |           | 0.80 | 1.00  | 1.23  | 1.34 | 1.50    |
| 1000 ~ 10000 |           | 0.85 | 1.00  | 1.10  | 1.13 | 1.15    |

Please refer to page 21, 22, 23 about the formed or taped product spec.  
Please refer to page 3 for the minimum order quantity.

CAT.8100V