

# ALUMINUM ELECTROLYTIC CAPACITORS

查询UFM2A105MED供应商

捷多邦, 专业PCB打样工厂, 24小时加急出货

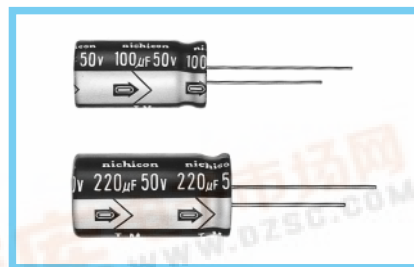
nichicon

**TM** series

Timer Circuit Use



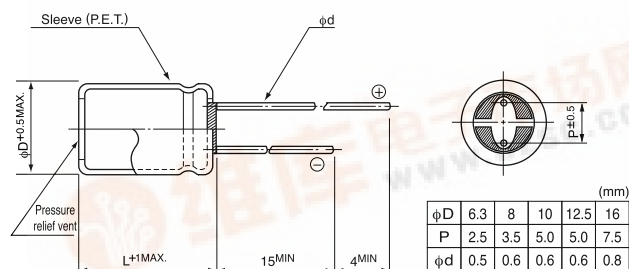
- Ideally suited for timer circuits.
- Excellent leakage current stability, even subjected to load or no load at high temperature for a long time.
- Adapted to the RoHS directive (2002/95/EC).



## Specifications

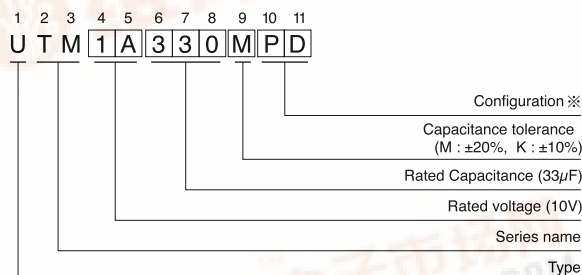
| Item                         | Performance Characteristics                                                                                                                                                                                                        |                 |                                         |      |      |     |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------------------------|------|------|-----|
| Category Temperature Range   | -40 ~ +85°C                                                                                                                                                                                                                        |                 |                                         |      |      |     |
| Rated Voltage Range          | 10 ~ 50V                                                                                                                                                                                                                           |                 |                                         |      |      |     |
| Rated Capacitance Range      | 1 ~ 470μF                                                                                                                                                                                                                          |                 |                                         |      |      |     |
| Capacitance Tolerance        | ± 20% (M) (±10% (K) semi-standard) at 120Hz, 20°C                                                                                                                                                                                  |                 |                                         |      |      |     |
| Leakage Current              | After 2 minutes' application of rated voltage, leakage current is 0.001CV+1 (μA) or less.                                                                                                                                          |                 |                                         |      |      |     |
| tan δ                        | Measurement frequency : 120Hz, Temperature : 20°C                                                                                                                                                                                  |                 |                                         |      |      |     |
|                              | Rated voltage (V)                                                                                                                                                                                                                  | 10              | 16                                      | 25   | 50   |     |
|                              | tan δ (MAX.)                                                                                                                                                                                                                       | 0.17            | 0.13                                    | 0.10 | 0.08 |     |
| Stability at Low Temperature | Measurement frequency : 120Hz                                                                                                                                                                                                      |                 |                                         |      |      |     |
|                              | Rated voltage (V)                                                                                                                                                                                                                  |                 | 10                                      | 16   | 25   | 50  |
|                              | Impedance ratio                                                                                                                                                                                                                    | Z-25°C / Z+20°C | 2                                       | 2    | 1.5  | 1.5 |
|                              | ZT / Z20 (MAX.)                                                                                                                                                                                                                    | Z-40°C / Z+20°C | 4                                       | 3    | 2    | 2   |
| Endurance                    | After 2000 hours' application of rated voltage at 85°C, capacitors meet the characteristics requirements listed at right.                                                                                                          |                 |                                         |      |      |     |
|                              | Capacitance change                                                                                                                                                                                                                 |                 | Within ±10% of initial value            |      |      |     |
|                              | tan δ                                                                                                                                                                                                                              |                 | 150% or less of initial specified value |      |      |     |
|                              | Leakage current                                                                                                                                                                                                                    |                 | Initial specified value or less         |      |      |     |
| Shelf Life                   | After storing the capacitors under no load at 85°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 white color letter on black sleeve.                                                                                                                                                                                   |                 |                                         |      |      |     |

## Radial Lead Type



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

## Type numbering system (Example : 10V 33μF)



※ Configuration

| φ D       | Pb-free leadwire<br>Pb-free PET sleeve |
|-----------|----------------------------------------|
| 6.3       | ED                                     |
| 8 · 10    | PD                                     |
| 12.5 · 16 | HD                                     |

## Dimensions

φD × L (mm)

| Cap.<br>(μF) | V    | 10      | 16      | 25      | 50      |
|--------------|------|---------|---------|---------|---------|
|              | Code | 1A      | 1C      | 1E      | 1H      |
| 1            | 010  |         |         |         | 6.3×11  |
| 2.2          | 2R2  |         |         |         | 6.3×11  |
| 3.3          | 3R3  |         |         | 6.3×11  | 6.3×11  |
| 4.7          | 4R7  |         |         | 6.3×11  | 8×11.5  |
| 10           | 100  |         | 6.3×11  | 8×11.5  | 10×12.5 |
| 22           | 220  | 6.3×11  | 8×11.5  | 10×12.5 | 10×16   |
| 33           | 330  | 8×11.5  | 10×12.5 | 10×16   | 10×20   |
| 47           | 470  | 8×11.5  | 10×12.5 | 10×16   | 12.5×20 |
| 100          | 101  | 10×16   | 10×20   | 12.5×20 | 12.5×25 |
| 220          | 221  | 10×20   | 12.5×25 | 16×25   | 16×31.5 |
| 330          | 331  | 12.5×25 | 16×25   | 16×25   |         |
| 470          | 471  | 12.5×25 | 16×25   | 16×31.5 |         |

Please refer to page 21, 22, 23 about the formed or taped product spec.