# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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### ALUMINUM ELECTROLYTIC CAPACITORS



UST

7mmL, Wide Temperature Range

• Wide temperature range of -55 to +105°C, with 7mm height.

• Compliant to the RoHS directive (2011/65/EU).

Values marked with an % in the dimension table

are scheduled to be discontinued and are not

recommended for new designs.

UST High Temperature

USA

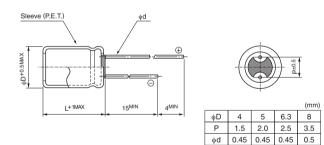
Anti-Solvent Feature

| 29 N129 |  |
|---------|--|
| 9 129 4 |  |
|         |  |

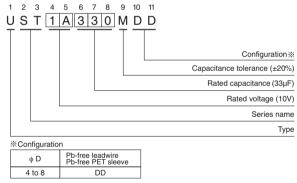
#### Specifications

| Item                                  | Performance Characteristics   |                     |    |      |   |      |      |      |      |  |           |  |
|---------------------------------------|---|---------------------|----|------|---|------|------|------|------|--|-----------|--|
| Category Temperature Range            | −55 to +105°C   |                     |    |      |   |      |      |      |      |  |           |  |
| Rated Voltage Range                   | 6.3 to 50V  |                     |    |      |   |      |      |      |      |  |           |  |
| Rated Capacitance Range               | 0.1 to 220µF  |                     |    |      |   |      |      |      |      |  |           |  |
| 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 0.01CV or 3 (µA), whichever is greater.   |                     |    |      |   |      |      |      |      |  |           |  |
|                                       | Measurement frequency : 120Hz at 20°C   |                     |    |      |   |      |      |      |      |  |           |  |
| Tangent of loss angle (tan $\delta$ ) | Rated voltage (V) 6.3   | 1                   | 0  | 16   |   | 25   |      | 35   | 50   |  |           |  |
|                                       | tan δ (MAX.) 0.24   | 0.                  | 21 | 0.18 |   | 0.15 |      | 0.13 | 0.12 |  |           |  |
|                                       | Measurement frequency : 120 Hz  |                     |    |      |   |      |      |      |      |  |           |  |
|                                       | Rated voltage (V  | 6.3                 |    | 0    | 16 2  |      | 5 35 | 50   | )    |  |           |  |
| Stability at Low Temperature          | Impedance ratio Z-25°C  | Z–25°C / Z+20°C     |    | 2    | 2   | 2    | 2    | 2    | 2    |  |           |  |
|                                       | ZT / Z20 (MAX.) Z-40°C  | X.) Z–40°C / Z+20°C |    | 5    | 5   | 4    | 3    | 3    | 3    |  |           |  |
| Endurance                             | The specifications listed at right shall be met when<br>the capacitors are restored to 20°C after the rated<br>voltage is applied for 1000 hours at 105°C.  |                     |    |      | Capacitance change Within ±25% of the initial capacitance value (16Vor less)<br>Within ±20% of the initial capacitance value (25Vor more)   tan δ 200% or less than the initial specified value   Leakage current Less than or equal to the initial specified value |      |      |      |      |  | Vor moré) |  |
| Shelf Life<br>Marking                 | 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.<br>Printed with white color letter on black sleeve. |                     |    |      |   |      |      |      |      |  |           |  |

#### Radial Lead Type



Type numbering system (Example : 10V 33µF)



#### Dimensions

| V        |      | 6.3     |     | 10      |     | 16      |     | 25<br>1E |    | 35<br>1V |    | <b>50</b><br>1H |        |
|----------|------|---------|-----|---------|-----|---------|-----|----------|----|----------|----|-----------------|--------|
| Cap.(µF) | Code | OJ      |     | 1A      |     | 10      |     |          |    |          |    |                 |        |
| 0.1      | 0R1  |         | 1   |         | 1   |         | 1   |          | 1  |          | !  | %4×7            | 1.0    |
| 0.22     | R22  |         | 1   |         | i   |         |     |          | 1  |          | 1  | ※4×7            | 2.3    |
| 0.33     | R33  |         | 1   |         | 1   |         | 1   |          | 1  |          | 1  | %4×7            | 3.5    |
| 0.47     | R47  |         | 1   |         |     |         | 1   |          | 1  |          | 1  | ※4×7            | 5.0    |
| 1        | 010  |         |     |         | 1   |         |     |          | 1  |          |    | 4 × 7           | 10     |
| 2.2      | 2R2  |         | 1   |         | 1   |         | 1   |          | 1  |          | 1  | 4 × 7           | 19     |
| 3.3      | 3R3  |         | 1   |         |     |         | 1   |          | 1  |          | 1  | 4 × 7           | 24     |
| 4.7      | 4R7  |         |     |         | i   |         |     |          | 1  | 4 × 7    | 24 | 5×7             | 29     |
| 10       | 100  |         | 1   |         | 1   | 4 × 7   | 29  | 5×7      | 33 | 5×7      | 36 | 6.3 × 7         | 44     |
| 22       | 220  | 4 × 7   | 34  | 5×7     | 38  | 5×7     | 44  | 6.3 × 7  | 51 | 6.3 × 7  | 57 | 8×7             | 65     |
| 33       | 330  | 5×7     | 42  | 5×7     | 47  | 6.3 × 7 | 57  | 6.3 × 7  | 63 | 8×7      | 72 |                 |        |
| 47       | 470  | 5×7     | 50  | 6.3 × 7 | 59  | 6.3 × 7 | 68  | 8×7      | 78 |          | 1  |                 | 1      |
| 100      | 101  | 6.3 × 7 | 77  | 8×7     | 96  | 8×7     | 107 |          | 1  |          | 1  | Case size       | Rated  |
| 220      | 221  | 8×7     | 130 | 8×7     | 140 |         | 1   |          | 1  |          | i  | φD×L (mm)       | ripple |

#### • Frequency coefficient of rated ripple current

| Frequency   | 50 Hz | 120 Hz | 300 Hz | 1 kHz | 10 kHz or more |     |
|-------------|-------|--------|--------|-------|----------------|-----|
| Coefficient | 0.70  | 1.00   | 1.17   | 1.36  | 1.50           | 171 |
|             |       |        |        |       |                |     |

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

Please refer to page 20, 21, 22 about the formed or taped product spec. Please refer to page 4 for the minimum order quantity.

