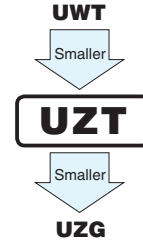


## UZT 4.5mmL Chip Type, Wide Temperature Range

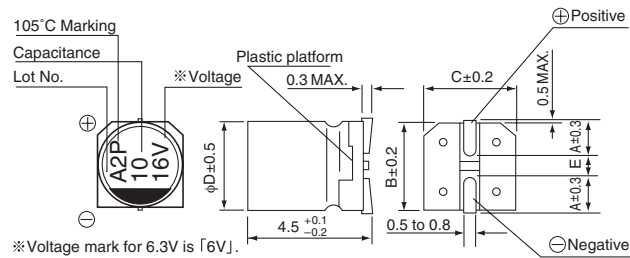


- Chip type with 4.5mm height, operating over wide temperature range of -40 to +105°C.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

### Specifications

| Item                          | Performance Characteristics   |  |    |    |    |    |    |
|-------------------------------|---|--|----|----|----|----|----|
| Category Temperature Range    | -40 to +105°C   |  |    |    |    |    |    |
| Rated Voltage Range           | 6.3 to 50V  |  |    |    |    |    |    |
| Rated Capacitance Range       | 1 to 100μF  |  |    |    |    |    |    |
| 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. |  |    |    |    |    |    |
| Tangent of loss angle (tan δ) | Measurement frequency : 120Hz at 20°C   |  |    |    |    |    |    |
|                               | Rated voltage (V)   | 6.3  | 10 | 16 | 25 | 35 | 50 |
| Stability at Low Temperature  | Measurement frequency : 120Hz   |  |    |    |    |    |    |
|                               | Rated voltage (V)   | 6.3  | 10 | 16 | 25 | 35 | 50 |
| Endurance                     | Impedance ratio   | Z-25°C / Z+20°C  | 6  | 5  | 3  | 3  | 3  |
|                               | ZT / Z20 (MAX.)   | Z-40°C / Z+20°C  | 10 | 10 | 6  | 6  | 4  |
| Shelf Life                    | Capacitance change  | Within ±25% of the initial capacitance value (16V or less) |    |    |    |    |    |
|                               | tan δ   | Within ±20% of the initial capacitance value (25V or more) |    |    |    |    |    |
| Resistance to soldering heat  | tan δ   | 300% or less than initial specified value                  |    |    |    |    |    |
|                               | Leakage current   | Less than or equal to the initial specified value          |    |    |    |    |    |
| Marking                       | Capacitance change  | Within ±10% of the initial capacitance value               |    |    |    |    |    |
|                               | tan δ   | Less than or equal to the initial specified value          |    |    |    |    |    |
| Marking                       | Leakage current   | Less than or equal to the initial specified value          |    |    |    |    |    |

### Chip Type



| φD | 4   | 5   | 6.3 |
|----|-----|-----|-----|
| A  | 1.8 | 2.1 | 2.4 |
| B  | 4.3 | 5.3 | 6.6 |
| C  | 4.3 | 5.3 | 6.6 |
| E  | 1.0 | 1.3 | 2.2 |

### Type numbering system (Example : 16V 10μF)



### Dimensions

| Cap. (μF) | Code | 6.3 |    | 10  |    | 16  |    | 25  |    | 35  |    | 50  |     |
|-----------|------|-----|----|-----|----|-----|----|-----|----|-----|----|-----|-----|
|           |      | 0J  | 1A | 1C  | 1E | 1V  | 1H |     |    |     |    |     |     |
| 1         | 010  |     |    |     |    |     |    |     |    |     |    | 4   | 5.4 |
| 2.2       | 2R2  |     |    |     |    |     |    |     |    |     |    | 4   | 9.6 |
| 3.3       | 3R3  |     |    |     |    |     |    |     |    |     |    | 4   | 12  |
| 4.7       | 4R7  |     |    |     |    |     |    | 4   | 11 | 4   | 13 | 5   | 16  |
| 10        | 100  |     |    |     |    | 4   | 16 | 5   | 20 | 5   | 22 | 6.3 | 26  |
| 22        | 220  | 4   | 19 | 5   | 24 | 5   | 26 | 6.3 | 33 | 6.3 | 36 |     |     |
| 33        | 330  | 5   | 26 | 5   | 30 | 6.3 | 35 | 6.3 | 42 |     |    |     |     |
| 47        | 470  | 5   | 32 | 6.3 | 40 | 6.3 | 44 |     |    |     |    |     |     |
| 100       | 101  | 6.3 | 52 |     |    |     |    |     |    |     |    |     |     |

Rated ripple current (mA rms) at 105°C 120Hz

### 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           |

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please select UUX(p.170), UUU(p.176) series if high C/V products are required.
- Please refer to page 3 for the minimum order quantity.