

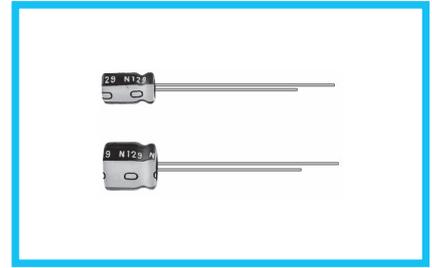
# UST

7mmL, Wide Temperature Range



- Wide temperature range of -55 to +105°C, with 7mm height.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

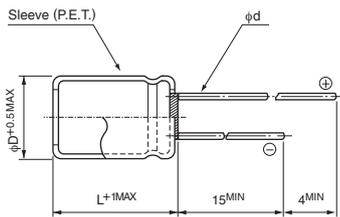
**UST**



## ■ Specifications

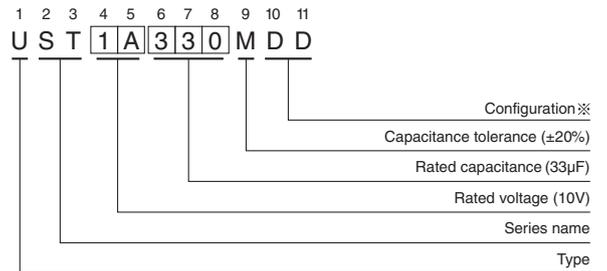
Item	Performance Characteristics																			
Category Temperature Range	-55 to +105°C																			
Rated Voltage Range	6.3 to 50V																			
Rated Capacitance Range	1 to 220μF																			
Capacitance Tolerance	±20% at 120Hz, 20°C																			
Leakage Current	After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV or 3 (μA), whichever is greater.																			
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C																			
	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>tan δ (MAX.)</td> <td>0.24</td> <td>0.21</td> <td>0.18</td> <td>0.15</td> <td>0.13</td> <td>0.12</td> </tr> </table>	Rated voltage (V)	6.3	10	16	25	35	50	tan δ (MAX.)	0.24	0.21	0.18	0.15	0.13	0.12					
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Stability at Low Temperature	Measurement frequency : 120 Hz																			
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Impedance ratio (MAX.)	Z-25°C / Z+20°C	3	2	2	2	2														
	Z-40°C / Z+20°C	6	5	4	3	3														
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 105°C.																			
	<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±25% of the initial capacitance value (≤16V) Within ±20% of the initial capacitance value (≥25V)</td> </tr> <tr> <td>tan δ</td> <td>200% or less than the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table>	Capacitance change	Within ±25% of the initial capacitance value (≤16V) Within ±20% of the initial capacitance value (≥25V)	tan δ	200% or less than the initial specified value	Leakage current	Less than or equal to the initial specified value													
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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 black sleeve.																			

## ■ Radial Lead Type



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

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



※ Configuration

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

## ● 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

● Dimension table in next page.

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## ■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	Rated Ripple (mArms) (105°C/120Hz)	Part Number
6.3 (0J)	22	4×7	0.24	3	34	UST0J220MDD
	33	5×7	0.24	3	42	UST0J330MDD
	47	5×7	0.24	3	50	UST0J470MDD
	100	6.3×7	0.24	6.3	77	UST0J101MDD
	220	8×7	0.24	13.86	130	UST0J221MDD
10 (1A)	22	5×7	0.21	3	38	UST1A220MDD
	33	5×7	0.21	3.3	47	UST1A330MDD
	47	6.3×7	0.21	4.7	59	UST1A470MDD
	100	8×7	0.21	10	96	UST1A101MDD
	220	8×7	0.21	22	140	UST1A221MDD
16 (1C)	10	4×7	0.18	3	29	UST1C100MDD
	22	5×7	0.18	3.52	44	UST1C220MDD
	33	6.3×7	0.18	5.28	57	UST1C330MDD
	47	6.3×7	0.18	7.52	68	UST1C470MDD
	100	8×7	0.18	16	107	UST1C101MDD
25 (1E)	10	5×7	0.15	3	33	UST1E100MDD
	22	6.3×7	0.15	5.5	51	UST1E220MDD
	33	6.3×7	0.15	8.25	63	UST1E330MDD
	47	8×7	0.15	11.75	78	UST1E470MDD
35 (1V)	4.7	4×7	0.13	3	24	UST1V4R7MDD
	10	5×7	0.13	3.5	36	UST1V100MDD
	22	6.3×7	0.13	7.7	57	UST1V220MDD
	33	8×7	0.13	11.55	72	UST1V330MDD
50 (1H)	1	4×7	0.12	3	10	UST1H010MDD
	2.2	4×7	0.12	3	19	UST1H2R2MDD
	3.3	4×7	0.12	3	24	UST1H3R3MDD
	4.7	5×7	0.12	3	29	UST1H4R7MDD
	10	6.3×7	0.12	5	44	UST1H100MDD
	22	8×7	0.12	11	65	UST1H220MDD

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.