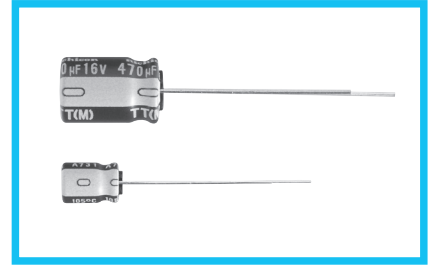
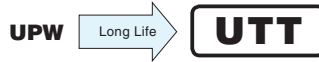


UTT Miniature Sized, Low Impedance,
High Reliability For
Switching Power Supplies



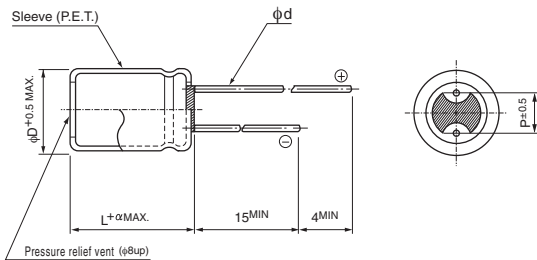
- Smaller case size and Long Life product.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).



Specifications

Item	Performance Characteristics							
Category Temperature Range	-40 to +105°C							
Rated Voltage Range	6.3 to 50V							
Rated Capacitance Range	1 to 470μF							
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 0.03CV 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	
	tan δ (MAX.)	0.30	0.28	0.24	0.18	0.16	0.14	
Stability at Low Temperature	Measurement frequency : 120Hz							
	Rated voltage (V)		6.3	10	16	25	35	50
	Impedance ratio (MAX.)	Z-25°C / Z+20°C	5	4	3	3	3	3
		Z-40°C / Z+20°C	10	10	8	6	4	4
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 5000 hours at 105°C.				Capacitance change	Within ±30% of the initial capacitance value		
					tan δ	300% or less than the initial specified value		
					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 dark blown sleeve.							

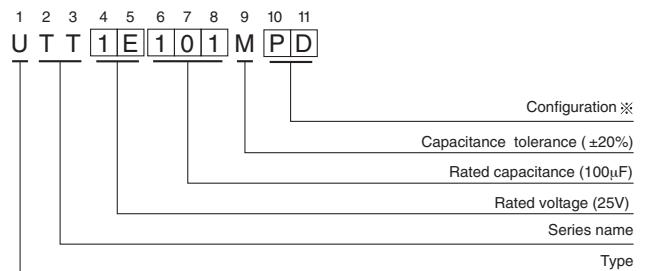
Radial Lead Type



α	(mm)			
	(L = 7)	1.0	(L ≥ 9)	1.5
φD	4	5	6.3	8
P	1.5	2.0	2.5	3.5
φd	0.45	0.45	0.5 (0.45)	0.6

() : Applied to 7mmL products

Type numbering system (Example : 25V 100μF)



※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
4 to 6.3	DD
8	PD

• Please refer to page 18 about the end seal configuration.

Frequency coefficient of rated ripple current

Cap. (μF)	Frequency	50Hz	120Hz	300Hz	1kHz	10kHz	100kHz or more
1 to 4.7		0.25	0.30	0.50	0.70	0.90	1.00
10 to 47		0.30	0.40	0.60	0.75	0.90	1.00
100 to 470		0.60	0.60	0.70	0.80	0.90	1.00

• Dimension table in next page.

UTT

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	Impedance (Ω) MAX. (20°C/100kHz)	Rated Ripple (mA _{rms}) (105°C/100kHz)	Part Number
6.3 (0J)	22	4×7	0.30	4.158	7.40	46	UTT0J220MDD
	47	5×7	0.30	8.883	4.00	74	UTT0J470MDD
	100	6.3×7	0.30	18.9	2.10	120	UTT0J101MDD
	220	6.3×9	0.30	41.58	1.10	163	UTT0J221MDD
	330	8×9	0.30	62.37	0.68	230	UTT0J331MPD
	470	8×9	0.30	88.83	0.68	230	UTT0J471MPD
10 (1A)	33	5×7	0.28	9.9	4.00	74	UTT1A330MDD
	150	6.3×9	0.28	45	1.10	163	UTT1A151MDD
	220	8×9	0.28	66	0.68	230	UTT1A221MPD
16 (1C)	10	4×7	0.24	4.8	7.40	46	UTT1C100MDD
	22	5×7	0.24	10.56	4.00	74	UTT1C220MDD
	47	6.3×7	0.24	22.56	2.10	120	UTT1C470MDD
	100	6.3×9	0.24	48	1.10	163	UTT1C101MDD
	150	8×9	0.24	72	0.68	230	UTT1C151MPD
	220	8×9	0.24	105.6	0.68	230	UTT1C221MPD
	330	8×9	0.24	158.4	0.68	230	UTT1C331MPD
	470	8×11.5	0.24	225.6	0.40	298	UTT1C471MPD
25 (1E)	22	5×7	0.18	16.5	4.00	74	UTT1E220MDD
	33	6.3×7	0.18	24.75	2.10	120	UTT1E330MDD
	47	6.3×9	0.18	35.25	1.10	163	UTT1E470MDD
	100	8×9	0.18	75	0.68	230	UTT1E101MPD
	220	8×11.5	0.18	165	0.40	298	UTT1E221MPD
	330	8×11.5	0.18	247.5	0.40	298	UTT1E331MPD
35 (1V)	4.7	4×7	0.16	4.935	7.40	37	UTT1V4R7MDD
	10	5×7	0.16	10.5	4.00	74	UTT1V100MDD
	22	6.3×7	0.16	23.1	2.10	120	UTT1V220MDD
	33	6.3×9	0.16	34.65	1.10	163	UTT1V330MDD
	47	6.3×9	0.16	49.35	1.10	163	UTT1V470MDD
50 (1H)	1	4×7	0.14	3	30.00	23	UTT1H010MDD
	2.2	4×7	0.14	3.3	23.00	26	UTT1H2R2MDD
	3.3	4×7	0.14	4.95	20.00	29	UTT1H3R3MDD
	4.7	5×7	0.14	7.05	14.00	37	UTT1H4R7MDD
	10	6.3×7	0.14	15	4.40	84	UTT1H100MDD
	22	6.3×9	0.14	33	2.40	112	UTT1H220MDD
	47	8×9	0.14	70.5	1.40	162	UTT1H470MPD

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.