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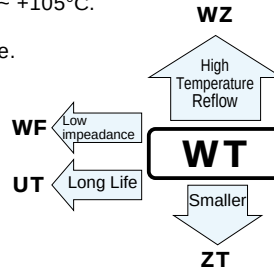
Jameco Part Number 610482

WT series

Chip Type, Wide Temperature Range



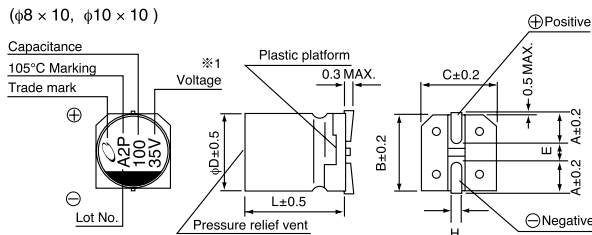
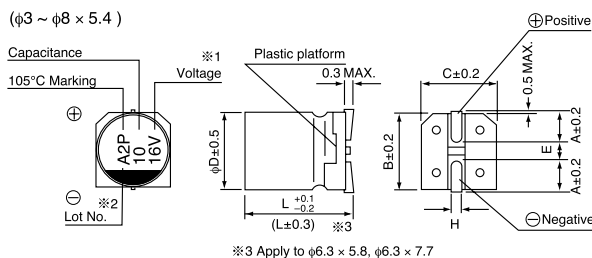
- Chip type operating over wide temperature range of to $-55 \sim +105^{\circ}\text{C}$.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape.
- Adapted to the RoHS directive (2002/95/EC).



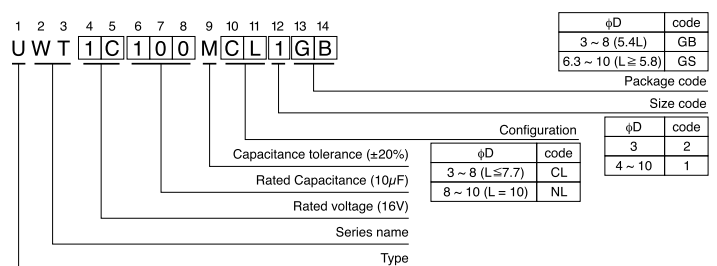
Specifications

Item	Performance Characteristics								
Category Temperature Range	-55 ~ +105°C								
Rated Voltage Range	4 ~ 50V								
Rated Capacitance Range	0.1 ~ 1500μF								
Capacitance Tolerance	±20% at 120Hz, 20°C								
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (μA) , whichever is greater.								
tan δ	Measurement frequency : 120Hz, Temperature : 20°C								
	Rated voltage (V)	4	6.3	10	16	25	35	50	
	tan δ (MAX.)	0.40	0.30	0.24	0.20	0.16	0.14	0.14	
Stability at Low Temperature	Measurement frequency : 120Hz								
	Rated voltage (V)		4	6.3	10	16	25	35	50
	Impedance ratio	Z-25°C / Z+20°C	7	4	3	2	2	2	2
	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	15	8	8	4	4	3	3
Endurance	After 1000 hours' application of rated voltage at 105°C, capacitors meet the characteristic requirements listed at right.				Capacitance change	Within ±25% of initial value for capacitors of φ3mm unit, and 16V or less. Within ±20% of initial value for capacitors of 25V or more.			
					tan δ	200% or less of initial specified value			
					Leakage current	Initial specified value or less			
Shelf Life	After storing the capacitors under no load at 105°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.								
Resistance to soldering heat	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristic requirements listed at right.				Capacitance change	Within ±10% of initial value			
					tan δ	Initial specified value or less			
					Leakage current	Initial specified value or less			
Marking	Black print on the case top.								

Chip Type



Type numbering system (Example : 16V 10 μF)



	(mm)								
$\phi D \times L$	3 x 5.4	4 x 5.4	5 x 5.4	6.3 x 5.4	6.3 x 5.8	6.3 x 7.7	8 x 5.4	8 x 10	10 x 10
A	1.5	1.8	2.1	2.4	2.4	2.4	3.3	2.9	3.2
B	3.3	4.3	5.3	6.6	6.6	6.6	8.3	8.3	10.3
C	3.3	4.3	5.3	6.6	6.6	6.6	8.3	8.3	10.3
E	0.8	1.0	1.3	2.2	2.2	2.2	2.3	3.1	4.5
L	5.4	5.4	5.4	5.4	5.8	7.7	5.4	10	10
H	0.5 ~ 0.8	0.5 ~ 0.8	0.5 ~ 0.8	0.5 ~ 0.8	0.5 ~ 0.8	0.5 ~ 0.8	0.5 ~ 0.8	0.8 ~ 1.1	0.8 ~ 1.1

● Dimension table in next page.

■ Dimensions

V	4	6.3	10	16	25	35	50
Cap. (μF)	0G	0J	1A	1C	1E	1V	1H
0.1	0R1						4×5.4 (3) 1.0
0.22	R22						4×5.4 (3) 2.6
0.33	R33						4×5.4 (3) 3.2
0.47	R47						4×5.4 (3) 3.8
1	010						4×5.4 (3) 6.3 (5.9)
2.2	2R2					3×5.4 7.5	4×5.4 (3) 11 (9)
3.3	3R3					3×5.4 9	4×5.4 14
4.7	4R7				4×5.4 (3) 13 (10)	4×5.4 15	5×5.4 19
10	100			4×5.4 (3) 18 (14)	5×5.4 23	5×5.4 25	6.3×5.4 30
22	220	4×5.4 22	4×5.4 22	5×5.4 27	5×5.4 30	6.3×5.4 38	6.3×5.4 42 ●8×5.4 51 (45)
33	330	5×5.4 30	5×5.4 30	5×5.4 35	6.3×5.4 40	6.3×5.4 48 ●8×5.4 59 (52)	6.3×7.7 60
47	470	5×5.4 36	5×5.4 36	6.3×5.4 46	6.3×5.4 50	●8×5.4 66 (59)	6.3×5.8 63 6.3×7.7 63
100	101	6.3×5.4 60	6.3×5.4 60	6.3×5.4 60	6.3×5.4 60	6.3×7.7 91	6.3×7.7 84 8×10 140
150	151	6.3×5.8 86	6.3×5.8 86	6.3×5.8 86	6.3×7.7 95	8×10 140	8×10 155 10×10 180
220	221	●8×5.4 102 (91)	●8×5.4 102 (91)	6.3×7.7 105	6.3×7.7 105	8×10 155	8×10 190 10×10 220
330	331	6.3×7.7 105	6.3×7.7 105	8×10 195	8×10 195	8×10 190	10×10 300
470	471	8×10 210	8×10 210	8×10 210	8×10 230	10×10 300	
680	681	8×10 210	8×10 210	10×10 310	10×10 310		
1000	102	8×10 230	8×10 230	10×10 310			Case size
1500	152	10×10 310	10×10 310				φ D × L (mm) Rated ripple

Rated Ripple (mArms) at 105°C 120Hz

() is also available with φ3mm upon request. In such a case, [2] will be put at 12th digit of type numbering system.

Size φ6.3×5.8 is available for capacitors marked. "●" In such a case, [6] will be put at 12th digit of type numbering system.

● Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz~
Coefficient	0.70	1.00	1.17	1.36	1.50

- Taping specifications are given in page 24.
- Recommended land size, soldering by reflow are given in page 25, 26.
- Please select UX(p.74), UJ(p.76) series if high C/V products are required.
- Please refer to page 3 for the minimum order quantity.