

UWF

Chip Type, Low Impedance



For SMD

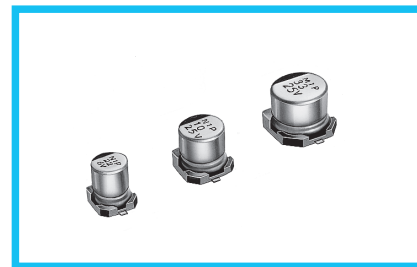


Low Impedance



Anti-Solvent Feature

- Chip type, low impedance temperature range up 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.



Products which are scheduled to be discontinued.
Not recommended for new designs.



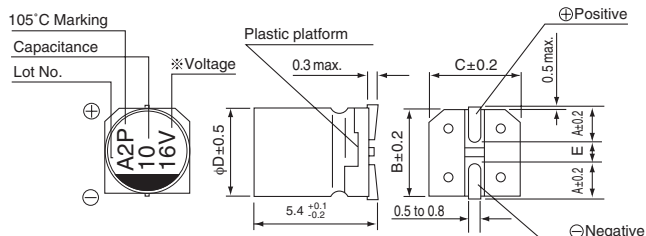
Specifications

Item	Performance Characteristics						
Category Temperature Range	-55 to +105°C						
Rated Voltage Range	6.3 to 35V						
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						
	Rated voltage (V)	6.3	10	16	25	35	
	tan δ (max.)	0.22	0.19	0.16	0.14	0.12	
Stability at Low Temperature	Measurement frequency : 120Hz						
	Rated voltage (V)		6.3	10	16	25	35
	Impedance ratio	Z(-25°C) / Z(+20°C)	2	2	2	2	2
	ZT / Z20 (max.)	Z(-55°C) / Z(+20°C)	4	4	3	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.			Capacitance change		Within ±20% of the initial capacitance value	
				tan δ		200% 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.						
Resistance to soldering heat	The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C.			Capacitance change		Within ± 10% of the initial capacitance value	
				tan δ		Less than or equal to the initial specified value	
				Leakage current		Less than or equal to the initial specified value	
Marking	Black print on the case top.						

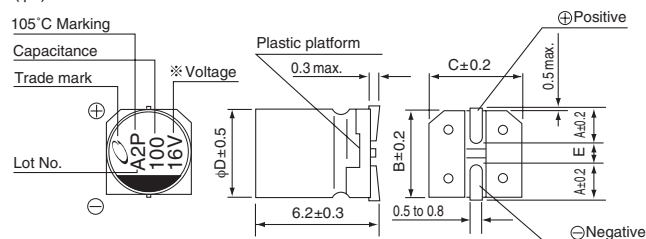
※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

Chip Type

(φ4 to φ6.3)

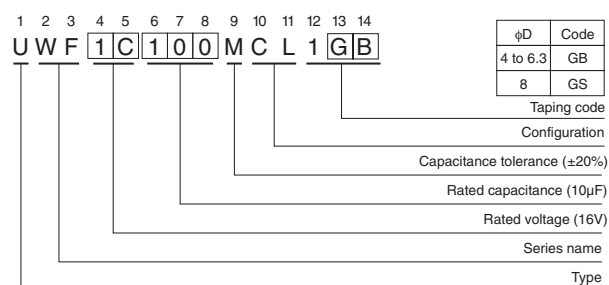


(φ8)



(mm)	4	5	6.3	8
A	1.8	2.1	2.4	3.3
B	4.3	5.3	6.6	8.3
C	4.3	5.3	6.6	8.3
E	1.0	1.3	2.2	2.3

Type numbering system (Example : 16V 10μF)



※ Voltage mark for 6.3V is 6V.

Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
Coefficient	0.35	0.50	0.64	0.83	1.00

● Dimension table in next page.

UWF

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μ F)	Case Size ϕ D $\times$ L (mm)	$\tan \delta$	Leakage Current (μ A) (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 $\times$ 5.4	0.22	3	5.0	50	UWF0J220MCL1GB
	33	5 $\times$ 5.4	0.22	3	2.6	80	UWF0J330MCL1GB
	47	5 $\times$ 5.4	0.22	3	2.6	80	UWF0J470MCL1GB
	68	6.3 $\times$ 5.4	0.22	4.284	1.3	115	UWF0J680MCL1GB
	100	6.3 $\times$ 5.4	0.22	6.3	1.3	115	UWF0J101MCL1GB
	150	8 $\times$ 6.2	0.22	9.45	0.8	150	UWF0J151MCL1GS
	220	8 $\times$ 6.2	0.22	13.86	0.8	150	UWF0J221MCL1GS
10 (1A)	22	5 $\times$ 5.4	0.19	3	2.6	80	UWF1A220MCL1GB
	33	5 $\times$ 5.4	0.19	3.3	2.6	80	UWF1A330MCL1GB
	47	6.3 $\times$ 5.4	0.19	4.7	1.3	115	UWF1A470MCL1GB
	68	6.3 $\times$ 5.4	0.19	6.8	1.3	115	UWF1A680MCL1GB
	100	8 $\times$ 6.2	0.19	10	0.8	150	UWF1A101MCL1GS
	150	8 $\times$ 6.2	0.19	15	0.8	150	UWF1A151MCL1GS
16 (1C)	10	4 $\times$ 5.4	0.16	3	5.0	50	UWF1C100MCL1GB
	15	5 $\times$ 5.4	0.16	3	2.6	80	UWF1C150MCL1GB
	22	5 $\times$ 5.4	0.16	3.52	2.6	80	UWF1C220MCL1GB
	33	6.3 $\times$ 5.4	0.16	5.28	1.3	115	UWF1C330MCL1GB
	47	6.3 $\times$ 5.4	0.16	7.52	1.3	115	UWF1C470MCL1GB
	68	8 $\times$ 6.2	0.16	10.88	0.8	150	UWF1C680MCL1GS
	100	8 $\times$ 6.2	0.16	16	0.8	150	UWF1C101MCL1GS
25 (1E)	4.7	4 $\times$ 5.4	0.14	3	5.0	50	UWF1E4R7MCL1GB
	6.8	4 $\times$ 5.4	0.14	3	5.0	50	UWF1E6R8MCL1GB
	10	5 $\times$ 5.4	0.14	3	2.6	80	UWF1E100MCL1GB
	15	6.3 $\times$ 5.4	0.14	3.75	1.3	115	UWF1E150MCL1GB
	22	6.3 $\times$ 5.4	0.14	5.5	1.3	115	UWF1E220MCL1GB
	33	6.3 $\times$ 5.4	0.14	8.25	1.3	115	UWF1E330MCL1GB
	47	8 $\times$ 6.2	0.14	11.75	0.8	150	UWF1E470MCL1GS
	68	8 $\times$ 6.2	0.14	17	0.8	150	UWF1E680MCL1GS
35 (1V)	1	4 $\times$ 5.4	0.12	3	5.0	50	UWF1V010MCL1GB
	1.5	4 $\times$ 5.4	0.12	3	5.0	50	UWF1V1R5MCL1GB
	2.2	4 $\times$ 5.4	0.12	3	5.0	50	UWF1V2R2MCL1GB
	3.3	4 $\times$ 5.4	0.12	3	5.0	50	UWF1V3R3MCL1GB
	4.7	4 $\times$ 5.4	0.12	3	5.0	50	UWF1V4R7MCL1GB
	6.8	5 $\times$ 5.4	0.12	3	2.6	80	UWF1V6R8MCL1GB
	10	5 $\times$ 5.4	0.12	3.5	2.6	80	UWF1V100MCL1GB
	15	6.3 $\times$ 5.4	0.12	5.25	1.3	115	UWF1V150MCL1GB
	22	6.3 $\times$ 5.4	0.12	7.7	1.3	115	UWF1V220MCL1GB
	33	8 $\times$ 6.2	0.12	11.55	0.8	150	UWF1V330MCL1GS
	47	8 $\times$ 6.2	0.12	16.45	0.8	150	UWF1V470MCL1GS

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.
- Please select UJJ if high C/V products are required.