

WF

Chip Type, Low Impedance

series



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 using carrier tape.
- Adapted to the RoHS directive (2002/95/EC).



Specifications

Item	Performance Characteristics						
Category Temperature Range	-55 ~ +105°C						
Rated Voltage Range	6.3 ~ 35V						
Rated Capacitance Range	1 ~ 220μF						
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)	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	After 1000 hours' application of rated voltage at 105°C, capacitors meet the characteristic requirements listed at right.				Capacitance change		Within ±20% of initial value
					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

(φ4 ~ 6.3)

105°C Marking

Capacitance

Lot No.

Trade mark

Voltage

Positive

Negative

Plastic platform

0.3 MAX.

C±0.2

0.5 MAX.

E

A±0.2

B±0.2

5.4 ±0.1

0.5 ~ 0.8

φD±0.5

φ8

105°C Marking

Capacitance

Lot No.

Trade mark

Voltage

Positive

Negative

Plastic platform

0.3 MAX.

C±0.2

0.5 MAX.

E

A±0.2

B±0.2

6.2±0.3

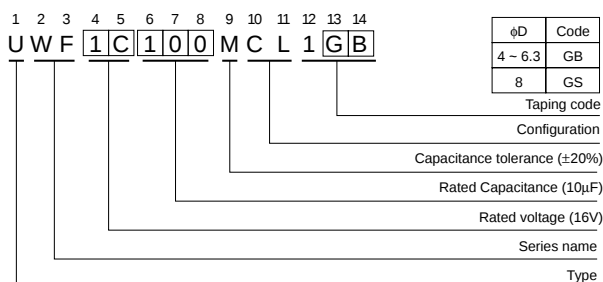
0.5 ~ 0.8

φD±0.5

φD	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

※ Voltage mark for 6.3V is 6V.

Type numbering system (Example : 16V 10μF)



Dimensions

V	6.3	10	16	25	35
Cap. (μF)	0J	1A	1C	1E	1V
1	010				4
1.5	1R5				4
2.2	2R2				4
3.3	3R3				4
4.7	4R7			4	4
6.8	6R8			4	5
10	100		4	5	5
15	150		5	6.3	6.3
22	220	4	5	6.3	6.3
33	330	5	6.3	6.3	8
47	470	5	6.3	8	8
68	680	6.3	8	8	
100	101	6.3	8		
150	151	8			
220	221	8			

Frequency coefficient of rated ripple current

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

Max. Impedance (Ω) at 20°C 100kHz
Rated Ripple (mArms) at 105°C 100kHz

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