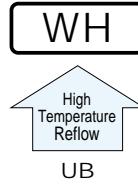


WH Chip Type, High Reliability
High Temperature (260°C) Reflow
series

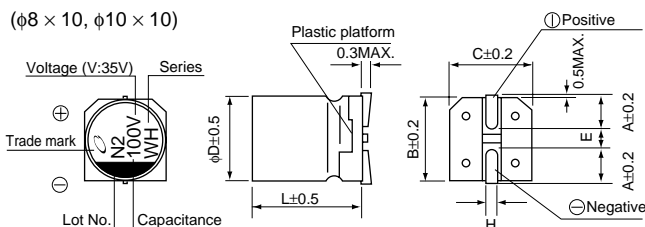
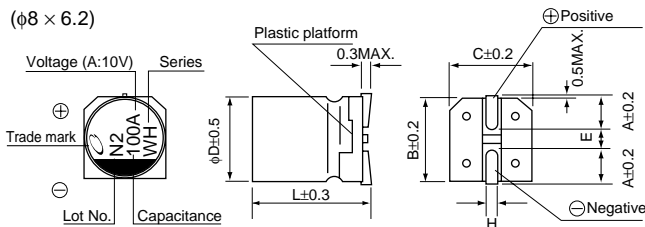


- Corresponding with 260°C peak reflow soldering
Recommended reflow condition : 260°C peak 5 sec. 230°C over 60 sec. 2 times (φ8×6.2, φ10×10 : 1 time)
- Chip type high temperature range, for +125°C use.
- Applicable to automatic mounting machine using carrier tape.
- Adapted to the RoHS directive (2002/95/EC).

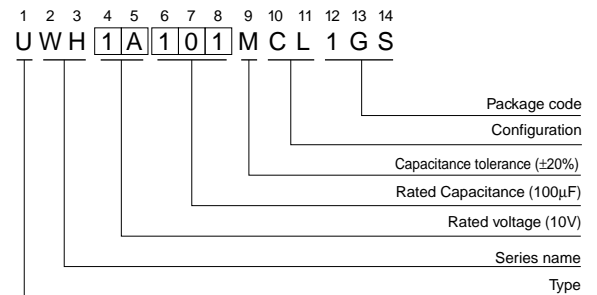
Specifications

Item	Performance Characteristics				
Category Temperature Range	-40 to +125°C				
Rated Voltage Range	10 to 50V				
Rated Capacitance Range	10 to 330μF				
Capacitance Tolerance	±20% at 120Hz, 20°C				
Leakage Current	After 1 minute's application of rated voltage, leakage current is not more than 0.03CV or 4(μA), whichever is greater.				
tan δ	Measurement frequency : 120Hz, Temperature : 20°C				
	Rated voltage (V)	10	16	25	35
Stability at Low Temperature	Measurement frequency : 120Hz				
	Rated voltage (V)	10	16	25	35
Endurance	After 1000 hours' application of rated voltage at 125°C, capacitors meet the characteristic requirements listed at right.				
	Capacitance change	Within ±30% of initial value			
Shelf Life	After storing the capacitors under no load at 125°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.				
	tan δ	300% or less of initial specified value			
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.				
	Leakage current	Initial specified value or less			
Marking	Black print on the case top.				

Chip Type



Type numbering system (Example : 10V 100μF)



	(mm)		
φD×L	8×6.2	8×10	10×10
A	3.3	2.9	3.2
B	8.3	8.3	10.3
C	8.3	8.3	10.3
E	2.3	3.1	4.5
L	6.2	10	10
H	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1

Voltage

V	10	16	25	35	50
Code	A	C	E	V	H

■Dimensions

Cap.(μ F)	V Code	10		16		25		35		50	
		1A		1C		1E		1V		1H	
10	100									8×6.2	24
22	220									8×6.2	38
33	330							8×6.2	44	8×10	46
47	470					8×6.2	48	8×10	52	10×10	58
100	101	8×6.2	58	8×10	66	8×10	74	10×10	80		
220	221	8×10	90	10×10	102	10×10	116				
330	331	10×10	112							Case size ϕ D×L (mm)	Rated ripple

Rated Ripple (mA_{rms}) at 125°C 120Hz

●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

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please refer to page 3 for the minimum order quantity.