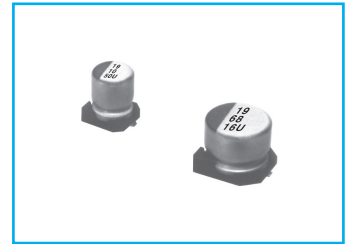
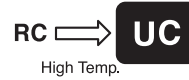


## UC Chip type, High Reliability Series

- Chip type, high temperature range, for 125°C use
- Designed for surface mounting on high density PC board
- Applicable to automatic insertion machine using carrier tape
- Complied to the RoHS directive



Item	Characteristics							
<b>Operating temperature range</b>	-40 ~ +125°C							
<b>Leakage current max.</b>	WV ≤ 100 I = 0.03CV or 4μA whichever is greater (after 2 minutes) WV ≥ 160 I = 0.04CV + 100μA(after 1 minutes)							
<b>Capacitance tolerance</b>	±20% at 120Hz, 20°C							
<b>Dissipation factor max. (at 120Hz, 20°C)</b>	WV	10	16	25	35~63	80~100	160~200	250~400
	tanδ	0.32	0.24	0.21	0.18	0.12	0.2	0.24
<b>Low temperature characteristics (Impedance ratio at 120Hz)</b>	WV	10	16	25	35~63	80~100	160~200	250~400
	Z-25°C/Z+20°C	8	6	4	4	3	3	6
	Z-40°C/Z+20°C	12	8	6	4	4	6	10
<b>Load life (after application of the rated voltage for 2000 hours at 125°C)</b>	Leakage current	Less than specified value						
	Capacitance change	Within ±30% of initial value						
	tanδ	Less than 300% of specified value						
<b>Shelf life (at 125°C)</b>	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4							
<b>Resistance to soldering heat</b>	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them at 250°C for 10 seconds.							
	Leakage current	Less than specified value						
	Capacitance change	Within ±10% of initial value						
	tanδ	Less than specified value						

● DRAWING (See page 59)

Unit : mm

-Series code of UC is "U"

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF \ WV	10		16		25		35		50		63	
10									8×6.2	65	8×6.2	40
22									8×6.2	65	8×10	67
33							8×6.2	65	8×10	125	8×10	67
47					8×6.2	65	8×10	125	10×10	200	10×10	115
68			8×6.2	65	8×6.2	65	10×10	200	12.5×13.5	525	12.5×13.5	335
100	8×6.2	65	8×10	125	8×10	125	10×10	200	12.5×13.5	525	12.5×13.5	335
220	8×10	125	10×10	200	10×10	200	12.5×13.5	525				
330	10×10	200	10×10	200	12.5×13.5	525						
470	10×10	200	12.5×13.5	525								
1000	12.5×13.5	525										

Ripple current (mA rms) at 125°C, 120Hz  
Case size ØD×L(mm)

μF \ WV	80		100		160		200		250		400	
3.3											12.5×13.5	30
4.7									12.5×13.5	45	12.5×13.5	30
10	8×10	45	8×10	45	10×10	45	10×10	45	12.5×13.5	85		
22	8×10	45	10×10	80	12.5×13.5	85	12.5×13.5	85				
33	10×10	80	10×10	80								
47	10×10	80	12.5×13.5	300								
68	12.5×13.5	300	12.5×13.5	300								

Ripple current (mA rms) at 125°C, 120Hz  
Case size ØD×L(mm)

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

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