

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

S
Solvent Proof
WV \leq 100V

RC → **UC**
High Temp.



Item	Characteristics														
Operating temperature range	-40 ~ +125°C														
Leakage current max.	I = 0.03CV or 4 μ A whichever is greater (after 2 minutes)														
Capacitance tolerance	$\pm 20\%$ at 120Hz, 20°C														
Dissipation factor max. (at 120Hz, 20°C)	WV	10	16	25	35~63	80~100	160~200	250~400							
	tan δ	0.32	0.24	0.21	0.18	0.12	0.2	0.24							
Low temperature characteristics (Impedance ratio at 120Hz)	WV	10	16	25	35~50	63~100	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							
Load life (after application of the rated voltage for 2000 hours at 125°C)	Leakage current	Less than specified value													
	Capacitance change	Within $\pm 30\%$ of initial value													
	tan δ	Less than 300% of specified value													
Shelf life (at 125°C)	After 1000 hours no load test, leakage current, capacitance and tan δ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4														
Resistance to soldering heat	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them at 250°C for 30 seconds.														
	Leakage current	Less than specified value													
	Capacitance change	Within $\pm 10\%$ of initial value													
	tan δ	Less than specified value													

● DRAWING (See page 62) -Series code of UC is "U"

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μ F \ WV	10	16	25	35	50	63
4.7				4×5.3	18	
10			4×5.3	25	4×5.3	23
15				5×5.3	23	
22					8×6.2	65
33				8×6.2	65	8×10
47			8×6.2	65	8×6.2	100
				8×10	125	8×10
68		8×6.2	65	8×6.2	170	12.5×13.5
			65	10×10	200	525
100	8×6.2	65	8×10	125	8×10	170
				10×10	200	12.5×13.5
220	8×10	125	10×10	200	8×10	150
				10×10	200	12.5×13.5
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)

μ F \ WV	80	100	160	200	250	400
3.3						12.5×13.5
4.7					85	12.5×13.5
10	8×10	45	8×10	45	10×10	65
			8×10	45	10×10	80
22	8×10	45	10×10	80	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 \leq
Coefficient	0.70	1.00	1.17	1.36	1.50