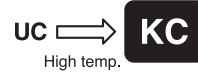
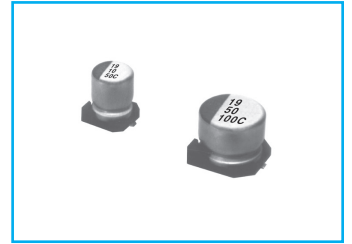


## KC Chip type, High Reliability Series

- Chip type, high temperature range, for 135°C use
- Designed for surface mounting on high density PC board
- Applicable to automatic insertion machine using carrier tape
- Complied to the RoHS directive



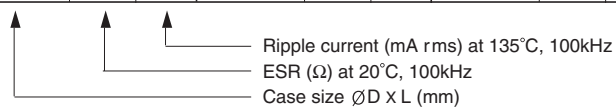
Item	Characteristics					
Operating temperature range	-40 ~ +135°C					
Leakage current max.	I = 0.01CV or 3μA whichever is greater (after 2 minutes)					
Capacitance tolerance	±20% at 120Hz, 20°C					
Dissipation factor max. (at 120Hz, 20°C)	WV	10	16	25	35	50
	tanδ	0.30	0.23	0.18	0.16	0.16
Low temperature characteristics (Impedance ratio at 120Hz)	WV	10	16	25	35	50
	Z-25°C/Z+20°C	8	6	4	4	4
	Z-40°C/Z+20°C	12	8	6	4	4
Load life (after application of the rated voltage for 2000 hours at 135°C)	Capacitance change	Within ±30% of initial value				
	tanδ	Less than 300% of the specified value				
	Leakage current	Less than specified value				
Shelf life (at 135°C)	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					
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 10 seconds.					
	Leakage current	Less than specified value				
	Capacitance change	Within ±10% of initial value				
	tanδ	Less than specified value				

### ● DRAWING (See page 62)

-Series code of KC is "C"

### ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF	WV		10			16			25			35			50		
	WV	WV	WV	ESR	Case	WV	ESR	Case	WV	ESR	Case	WV	ESR	Case	WV	ESR	Case
47												8×10	0.20	270	8×10	0.25	270
68												8×10	0.20	270			
100						8×10	0.20	270	8×10	0.20	270	8×10	0.20	270	10×10	0.20	500
220	8×10	0.20	270	8×10	0.20	270	10×10	0.15	500	10×10	0.15	500					
330	10×10	0.20	270	10×10	0.15	500	10×10	0.15	500								
470	10×10	0.15	500	10×10	0.15	500											



### ● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

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