

UCHChip Type, High Reliability.
Low temperature ESR specification.

Expanded

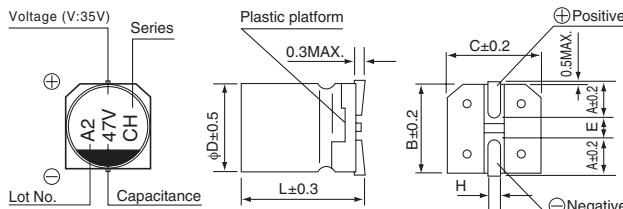
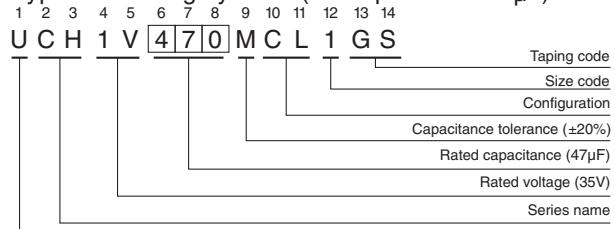
- Added ESR specification after the test at -40°C.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU).

UCH  **ucz**
**■ Specifications**

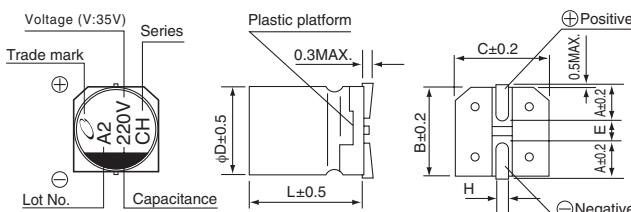
Item	Performance Characteristics				
Category Temperature Range	-40 to +125°C				
Rated Voltage Range	35V				
Rated Capacitance Range	47 to 330μF				
Capacitance Tolerance	±20% at 120Hz, 20°C				
Leakage Current	After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV (μA).				
Tangent of loss angle (tan δ)	Rated voltage (V)	35	Measurement frequency : 120Hz at 20°C		
	tan δ (MAX.)	0.16			
Stability at Low Temperature	Rated voltage (V)	35	Measurement frequency : 120Hz		
	Impedance ratio ZT / Z20 (MAX.)	Z-40°C / Z+20°C	3		
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 125°C.				
	Capacitance change	Within ±30% of the initial capacitance value			
	tan δ	300% or less than the initial specified value			
	Leakage current	Less than or equal to the initial specified value			
Shelf Life	After storing the capacitors under no load at 125°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.				
Resistance to soldering heat	The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C.				
	Capacitance change	Within ±10% of the initial capacitance value			
	tan δ	Less than or equal to the initial specified value			
	Leakage current	Less than or equal to the initial specified value			
Marking	Black print on the case top.				

■ Chip Type

(φ 6.3)

**Type numbering system (Example : 35V 47μF)**

(φ8, φ10)



Voltage	(mm)
V 35	
Code	
V	
A 6.3×7.7	6.3×7.7
B 8×10	8×10
C 10×10	10×10

■ Dimensions

Cap. (μF)	Code	35										
		1V										
47	470	6.3	×	7.7		0.30		3		6		197
100	101	6.3	×	7.7		0.30		3		6		197
220	221	8	×	10		0.20		2		4.5		270
330	331	10	×	10		0.15		1.5		3.5		500
		Case size		Initial		Initial		after				
		φD × L		20°C		-40°C		2000hours				
		(mm)		100kHz		100kHz		100kHz				
		ESR		ESR		ESR		ESR				

Max. ESR (Ω) at 20°C / -40°C 100k to 400kHz,
Rated ripple Current (mA rms) at 125°C 100kHz**Frequency coefficient of rated ripple current**

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