

ALUMINUM ELECTROLYTIC CAPACITORS

UCH

Chip 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 ← Low ESR **UCZ**

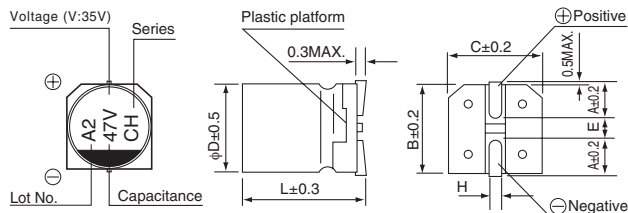


Specifications

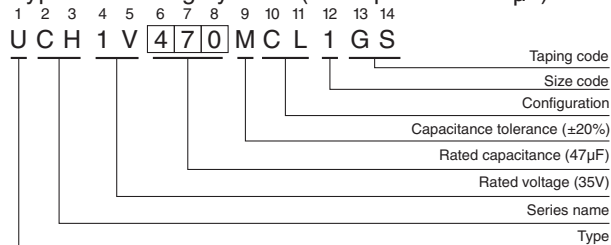
Item	Performance Characteristics	
Category Temperature Range	-40 to +125°C	
Rated Voltage Range	35V	
Rated Capacitance Range	47 to 330μF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV.	
Tangent of loss angle (tan δ)	Rated voltage (V)	35
	tan δ (MAX.)	0.16
Measurement frequency : 120Hz at 20°C		
Stability at Low Temperature	Rated voltage (V)	35
	Impedance ratio ZT / Z20 (MAX.)	Z-40°C / Z+20°C 3
Measurement frequency : 120Hz		
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

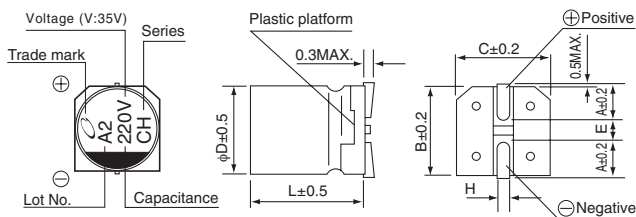
(φ 6.3)



Type numbering system (Example : 35V 47μF)



(φ8, φ10)



Rated Voltage		(mm)		
V	35	6.3×7.7	8×10	10×10
A	2.4	2.9	3.2	
B	6.6	8.3	10.3	
C	6.6	8.3	10.3	
E	2.2	3.1	4.5	
L	7.7	10	10	
H	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1	

Dimensions

V		35	
Cap. (μF)	Code	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 φD × L (mm)		Initial 20°C	Initial -40°C
		100kHz	100kHz
		1000hours	1000hours
		Rated ripple	Rated ripple
		ESR	ESR

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

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