ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UCH

Chip Type, High Reliability.
Low temperature ESR specification.

For SMD | Long Life | Anti-Solvent Feature

- 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,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

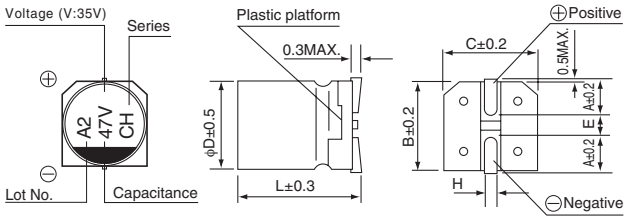
UCH ← Low ESR → UCZ

■Specifications

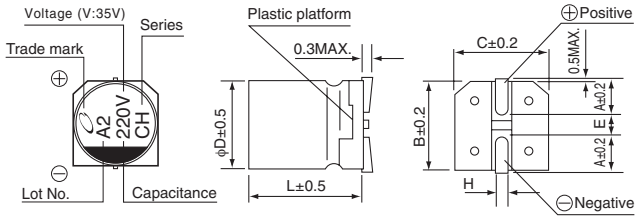
Item	Performance Characteristics
Category Temperature Range	−40 to +125°C
Rated Voltage Range	25 to 63V
Rated Capacitance Range	33 to 560μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV (μA).
Tangent of loss angle (tan δ)	Rated voltage (V): 25 / 35 / 50 / 63; tan δ (MAX.): 0.18 / 0.16 / 0.16 / 0.14. Measurement frequency : 120Hz at 20°C
Stability at Low Temperature	Rated voltage (V): 25 / 35 / 50 / 63; Impedance ratio ZT / Z20 (MAX.) Z–40°C / Z+20°C: 3 / 3 / 3 / 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

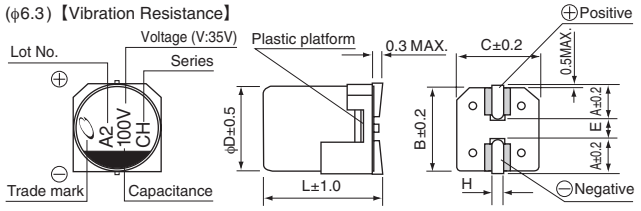
(φ6.3)【Standard】



(φ8, φ10)【Standard】



(φ6.3)【Vibration Resistance】



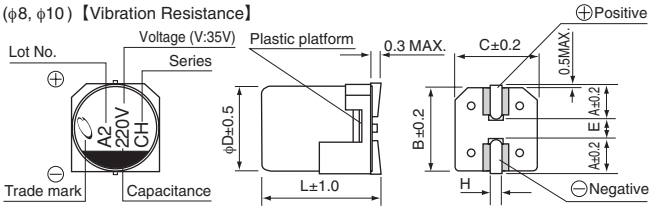
Type numbering system (Example : 35V 47μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	C	H	1	V	4	7	0	M	C	L	1	G	S

- 14: Taping code
- 13: Configuration
- 11: Capacitance tolerance (±20%)
- 10: Rated capacitance (47μF)
- 8: Rated voltage (35V)
- 5: Series name
- 3: Type

Size	Code
Standard	L
Vibration Resistance	S

(φ8, φ10)【Vibration Resistance】



Voltage				
V	25	35	50	63
Code	E	V	H	J

Standard (mm)

φD×L	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 11

Vibration Resistance (mm)

φD×L	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	1.1 to 1.5	1.1 to 1.5

● 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

● Dimension table in next page.

UCH

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20℃ after 2 minutes)	ESR (Ω) MAX.			Rated Ripple (mArms) (125℃/100kHz)	Part Number
					Initial 20℃ 100kHz	Initial −40℃ 100kHz	after endurance test 2000hours −40℃ 400kHz		
25 (1E)	150	6.3×7.7	0.18	37.5	0.30	3.0	6.0	197	UCH1E151MC□1GS
	330	8×10	0.18	82.5	0.20	2.0	4.5	270	UCH1E331MC□1GS
	560	10×10	0.18	140	0.15	1.5	3.5	500	UCH1E561MC□1GS
35 (1V)	47	6.3×7.7	0.16	16.45	0.30	3.0	6.0	197	UCH1V470MC□1GS
	100	6.3×7.7	0.16	35	0.30	3.0	6.0	197	UCH1V101MC□1GS
	220	8×10	0.16	77	0.20	2.0	4.5	270	UCH1V221MC□1GS
	330	10×10	0.16	115.5	0.15	1.5	3.5	500	UCH1V331MC□1GS
50 (1H)	47	6.3×7.7	0.16	23.5	0.80	8.0	—	150	UCH1H470MC□1GS
	100	8×10	0.16	50	0.40	6.0	—	250	UCH1H101MC□1GS
	220	10×10	0.16	110	0.25	3.0	—	400	UCH1H221MC□1GS
63 (1J)	33	6.3×7.7	0.14	20.79	0.80	8.0	—	150	UCH1J330MC□1GS
	68	8×10	0.14	42.84	0.40	6.0	—	250	UCH1J680MC□1GS
	100	10×10	0.14	63	0.25	3.0	—	400	UCH1J101MC□1GS

□ : Enter the appropriate configuration code.

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Aluminium Electrolytic Capacitors - SMD ***category:***

Click to view products by Nichicon ***manufacturer:***

Other Similar products are found below :

EEV-FK1E332W 22927 MAL214099813E3 HUB1800-S 34610 RYK-50V101MG5TT-FL 107AXZ016MQ5 UCX1E102MNQ1MS EMF1EM101E83D00R EMK1AM221E83D00R EMK1EM471GB0D00R EMK1VM101E83D00R EMVY350ARA221MHA0G UV2G3R3M0810VG EMK1VM101FB0D00R RVT2A4R7M0605 MAL214097402E3 MAL215375471E3 MAL224699909E3 MAL224699813E3 MAL215099014E3 MAL215099017E3 MAL215099117E3 MAL215099818E3 HV100M100E077ETR RC0J226M04005VR RC0J476M05005VR RC1A227M08010VR RC1V476M6L006VR MAL214099111E3 EXV107M025A9HAA 50SEV1M4X5.5 50SKV1M4X5.5 TYEH1A336E55MTR UCD1V100MCQ1GS UCX1H471MNQ1MS 35SEV47M6.3X8 35SGV220M10X10.5 35SLV10M5X6.1 VEJ220M1VTR-0606 VES2R2M1HTR-0405 50SEV10M6.3X5.5 50SGV1M4X6.1 107SML016M EDK226M035A9DAA EEV-HA1A471UP SC1C476M05005VR UCX1H471MNS1MS VZH331M1ETR-0810 VES101M1CTR-0605