ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UUE

Chip Type, Vibration Resistance

For SMD | Long Life | Anti-Solvent Feature

- Chip type with load life of 2000 to 5000 hours at 125°C.
- Suited for automobile electronics where heavy duty services are indispensable.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

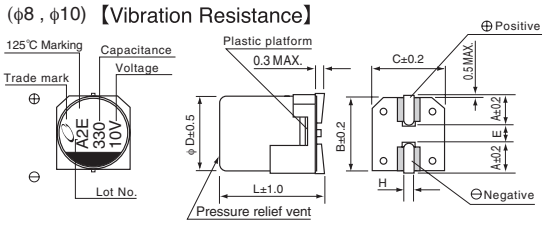
UUB → Vibration Resistance → UUE → High Temperature → UBC

■Specifications

Item	Performance Characteristics							
Category Temperature Range	−40 to +125°C (φ8, φ10), −55 to +125°C (φ12.5 to 18)							
Rated Voltage Range	10 to 50V							
Rated Capacitance Range	33 to 4700μF							
Capacitance Tolerance	±20% at 120Hz, 20°C							
Leakage Current	After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV or 4 (μA), whichever is greater.							
Tangent of loss angle (tan δ)	For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF. (φ12.5 to φ18)							
	Rated voltage (V)		10	16	25	35	50	120Hz 20°C
	tan δ (MAX)	φ8, φ10	0.26	0.20	0.16	0.14	0.14	
		φ12.5 to φ18	0.22	0.18	0.16	0.14	0.12	
Stability at Low Temperature	Rated voltage (V)		10	16	25	35	50	120Hz
	Impedance ratio Z−40°C / Z+20°C (MAX)	φ8, φ10	10	8	6	4	4	
		φ12.5 to φ18	8	6	4	3	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 5000 hours (2000 hours for φD = 8 and 10) 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.							
Marking	Black print on the case top.							

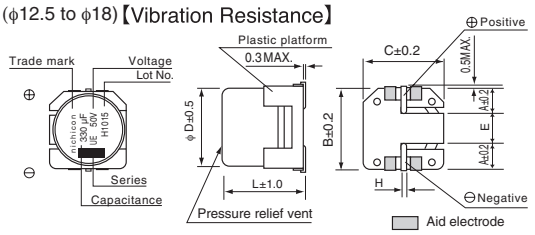
■Chip Type

(φ8, φ10) 【Vibration Resistance】



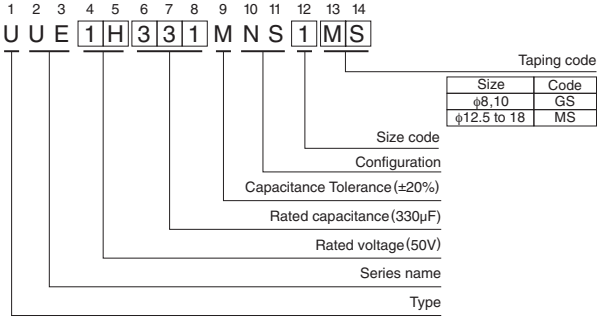
※ φ8 to φ10 The standard structure product is also available upon request, please refer to UUB.

(φ12.5 to φ18) 【Vibration Resistance】



※ φ12.5 to φ18 The standard structure product is also available upon request, please ask for details.

Type numbering system (Example : 50V 330μF)



(mm)

φD	8	10	12.5	16	18
A	2.9	3.2	4.8	5.4	6.4
B	8.3	10.3	13.6	17.1	19.1
C	8.3	10.3	13.6	17.1	19.1
E	3.1	4.5	4.0	6.3	6.3
L	10	10	13.5,16	16.5,21.5	16.5,21.5
H	1.1 to 1.5	1.1 to 1.5	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4

●Frequency coefficient of rated ripple current

φD	Frequency / Cap.(μF)	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
φ8, φ10	33 to 330	0.47	0.67	0.78	0.91	1.00
φ12.5 to φ18	100 to 680	0.53	0.67	0.82	0.89	1.00
	1000 to 4700	0.74	0.87	0.96	0.98	1.00

●Dimension table in next page.

UUE

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20℃ after 1 minute)	Rated Ripple (mArms) (125℃/100kHz)	Part Number
10 (1A)	220	8×10	0.26	66	140	UUE1A221MNS1GS
	330	10×10	0.26	99	190	UUE1A331MNS1GS
	470	12.5×13.5	0.22	141	750	UUE1A471MNS1MS
	680	12.5×16	0.22	204	900	UUE1A681MNS1MS
	1000	12.5×16	0.22	300	900	UUE1A102MNS1MS
	2200	18×16.5	0.24	660	1200	UUE1A222MNS1MS
	2200	16×21.5	0.24	660	1200	UUE1A222MNS6MS
	3300	18×16.5	0.26	990	1200	UUE1A332MNS1MS
	4700	18×21.5	0.28	1410	1550	UUE1A472MNS1MS
16 (1C)	100	8×10	0.20	48	140	UUE1C101MNS1GS
	220	10×10	0.20	105.6	190	UUE1C221MNS1GS
	330	12.5×13.5	0.18	158.4	750	UUE1C331MNS1MS
	470	12.5×13.5	0.18	225.6	750	UUE1C471MNS1MS
	680	16×16.5	0.18	326.4	1000	UUE1C681MNS1MS
	1000	18×16.5	0.18	480	1200	UUE1C102MNS1MS
	2200	18×16.5	0.20	1056	1200	UUE1C222MNS1MS
25 (1E)	100	8×10	0.16	75	140	UUE1E101MNS1GS
	220	10×10	0.16	165	190	UUE1E221MNS1GS
	330	12.5×13.5	0.16	247.5	750	UUE1E331MNS1MS
	470	16×16.5	0.16	352.5	1000	UUE1E471MNS1MS
	680	18×16.5	0.16	510	1200	UUE1E681MNS1MS
	680	16×21.5	0.16	510	1200	UUE1E681MNS6MS
	1000	18×21.5	0.16	750	1550	UUE1E102MNS1MS
35 (1V)	47	8×10	0.14	49.35	100	UUE1V470MNS1GS
	100	10×10	0.14	105	150	UUE1V101MNS1GS
	220	12.5×13.5	0.14	231	550	UUE1V221MNS1MS
	330	16×16.5	0.14	346.5	1000	UUE1V331MNS1MS
	470	16×16.5	0.14	493.5	1000	UUE1V471MNS1MS
	680	18×16.5	0.14	714	1200	UUE1V681MNS1MS
	1000	18×21.5	0.14	1050	1400	UUE1V102MNS6MS
50 (1H)	33	8×10	0.14	49.5	90	UUE1H330MNS1GS
	47	10×10	0.14	70.5	130	UUE1H470MNS1GS
	100	12.5×13.5	0.12	150	500	UUE1H101MNS1MS
	220	16×16.5	0.12	330	850	UUE1H221MNS1MS
	330	16×16.5	0.12	495	850	UUE1H331MNS1MS
	470	18×16.5	0.12	705	950	UUE1H471MNS1MS

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