ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UUE

Chip Type, Vibration Resistance

For SMD　Long Life

- Chip type with load life of 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 Qualified. Please contact us for details.

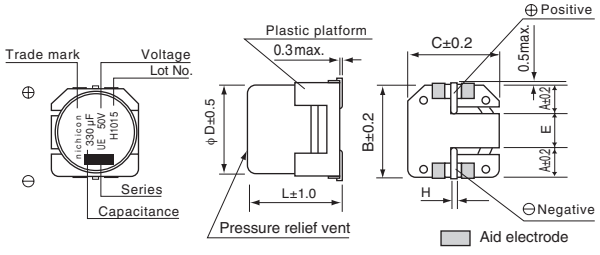
UUB → Vibration Resistance → UUE → High Temperature → UBC

■Specifications

Item	Performance Characteristics					
Category Temperature Range	−55 to +125°C					
Rated Voltage Range	16 to 50V					
Rated Capacitance Range	33 to 2200μF					
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 (μA).					
Tangent of loss angle (tan δ)	For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF.					
	Rated voltage (V)	16	25	35	50	120Hz 20°C
	tan δ (max.)	0.18	0.16	0.14	0.12	
Stability at Low Temperature	Rated voltage (V)	16	25	35	50	120Hz
	Impedance ratio Z(−40°C) / Z(+20°C) (max.)	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 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.					

※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

■Chip Type



Type numbering system (Example : 50V 330μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	U	E	1	H	3	3	1	M	N	S	1	M	S

- 14: Taping code
- 12: Size code
- 11: Configuration
- 9: Capacitance Tolerance (±20%)
- 6 7 8: Rated capacitance (330μF)
- 4 5: Rated voltage (50V)
- 3: Series name
- 1 2: Type

(mm)

φD	12.5	16	18
A	4.8	5.4	6.4
B	13.6	17.1	19.1
C	13.6	17.1	19.1
E	(4.0)	(6.3)	(6.3)
L	13.5,16	16.5,21.5	16.5,21.5
H	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
φ12.5 to φ18	100 to 680	0.53	0.67	0.82	0.89	1.00
	1000 to 2200	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
16 (1C)	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)	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)	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)	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.