ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

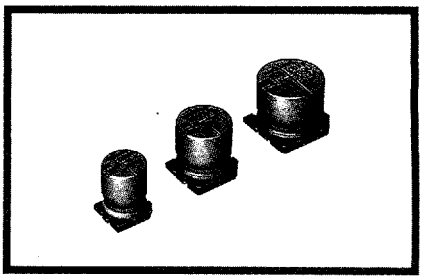
UG

Chip Type, Higher Capacitance Range

series


For SMD


Anti-Solvent Feature (Through 100V only)

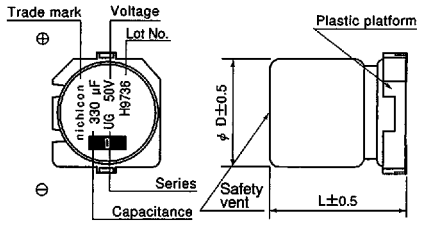


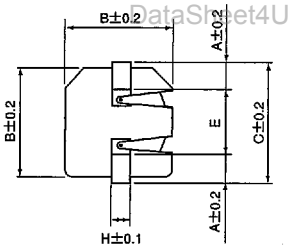
- Chip Type, higher capacitance in larger case sizes (φ12.5, φ16, φ18, φ20)
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape and tray.

■Specification

Item	Performance Characteristics										
Operating Temperature Range	−40～+85℃										
Voltage Range	6.3～450V										
Capacitance Range	4.7～10000μF										
Capacitance Tolerance	±20% (120Hz, 20℃)										
Leakage Current	Rated voltage(V)	6.3～100								160～450	
	—	After 1 minutes' application of rated voltage, leakage current is not more than 0.03CV or 4(μA), whichever is greater.								I=0.04CV+100 (μA)max.(1 minute's)	
tan δ	Rated voltage(V)	6.3	10	16	25	35	50	63	100	160～250	400・450
	tan δ (MAX)	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.08	0.20	0.25
	For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF.										
Stability at Low Temperature	Rated voltage(V)	6.3	10	16	25	35	50	63	100	160～250	400・450
	Impedance ratio Z−25℃/Z+20℃	5	4	3	2	2	2	2	2	3	6
	ZT/Z20(MAX.) Z−40℃/Z+20℃	12	10	8	5	4	3	3	3	6	10
Load Life	After 2000 hours' application of rated voltage at 85℃, capacitors meet the characteristics requirements listed at right.	Leakage current: Initial specified value or less Capacitance change: Within ±20% of initial value tan δ: 200% or less of initial specified value									
Shelf Life	After leaving capacitors under no load at 85℃ for 1000 hours, they meet the specified value for load life characteristics listed above.										
Marking	Black print on the case top.										
Applicable Standards	JIS C-5141 JIS C-5102										

■Drawing





φD	12.5	16	18	20
A	4.0	4.5	5.0	5.0
B	13.6	17.1	19.1	21.1
C	16.0	19.5	21.5	23.5
E	8.0	10.5	11.5	13.5
H	2.5	3.75	3.75	3.75

Type numbering system (Example : 50V 330μF)

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

Package code

Taping	MS
Tray	ZD

Configuration

φD	Code
12.5～18	NR
20	RR

Capacitance Tolerance (±20%)
Capacitance (330μF)
Rated voltage (50V)
Series name
Type

■Dimension

DXL (mm)

(μF) Cap. \ V	6.3		10		16		25		35		50	
Code	0J		1A		1C		1E		1V		1H	
220 221											12.5×13.5	450
330 331											12.5×13.5	520
470 471							12.5×13.5	550	12.5×13.5	580	● 16×16.5	740
1000 102			12.5×13.5	620	12.5×13.5	710	12.5×16	820	● 16×16.5	1000	18×21.5	1150
2200 222	12.5×16	890	12.5×16	960	● 16×16.5	1150	△ 18×16.5	1350	18×21.5	1550		
3300 332	● 16×16.5	1200	16×16.5	1300	△ 18×16.5	1450	18×21.5	1700				
4700 472	16×16.5	1400	△ 18×16.5	1500	18×21.5	1750						
6800 682	△ 18×16.5	1650	18×21.5	1850								
10000 103	18×21.5	2000	20×21.5	2200								

(μF) Cap. \ V	63		100		160		200		250		400		450	
Code	1J		2A		2C		2D		2E		2G		2W	
4.7 4R7											12.5×13.5	115	12.5×13.5	115
10 100									12.5×13.5	150	● 16×16.5	140	● 16×16.5	140
22 220							12.5×13.5	235	12.5×16	240	△ 18×16.5	280	16×21.5	275
33 330							12.5×16	310	● 16×16.5	340	18×21.5	350	18×21.5	345
47 470					12.5×16	370	● 16×16.5	415	△ 18×16.5	415	20×21.5	430		
68 680			12.5×13.5	350	● 16×16.5	500	△ 18×16.5	505	★ 18×21.5	490				
100 101	12.5×13.5	370	12.5×16	440	△ 18×16.5	590	18×21.5	590						
220 221	12.6×16	580	△ 18×16.5	665										
330 331	● 16×16.5	680	18×21.5	825										
470 471	△ 18×16.5	850											Case size	Allowable Ripple

Size φ12.5X21 is available for capacitors marked,"●". Size φ16X21.5L is available for capacitors marked,"△". Size φ20X16.5L is available for capacitors marks,"★".

※In this case, 6 will be put at 12th digit of type numbering system.

Allowable Ripple (mA rms) at 85℃ 120Hz