

ALUMINUM ELECTROLYTIC CAPACITORS

KA series For High Grade Audio Equipment, Wide Temperature Range.



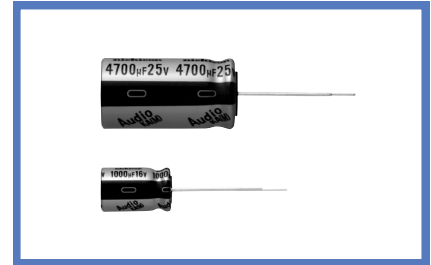
NEW

- 105°C high quality capacitors for audio equipment.
- Selected materials to create superior acoustic sound.
- Compliant to the RoHS directive (2002/95/EC).

KA



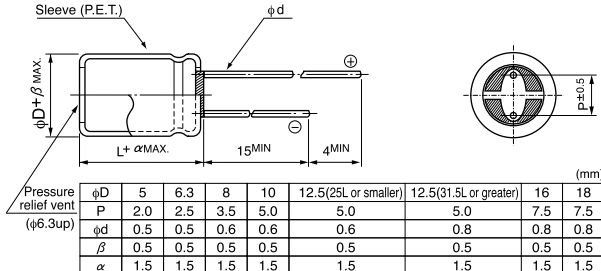
KT



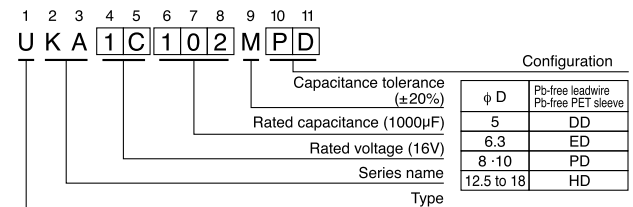
Specifications

Item	Performance Characteristics																													
Category Temperature Range	-55 to +105°C																													
Rated Voltage Range	6.3 to 50V																													
Rated Capacitance Range	22 to 22000μF																													
Capacitance Tolerance	±20% at 120Hz, 20°C																													
Leakage Current	After 1 minute's application of rated voltage, leakage current is not more than 0.03CV or 4 (μA), whichever is greater. After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (μA), whichever is greater.																													
Tangent of loss angle (tan δ)	<table><tr><td>Rated voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>tan δ (MAX.)</td><td>0.30</td><td>0.26</td><td>0.22</td><td>0.18</td><td>0.16</td><td>0.14</td></tr></table> Measurement frequency : 120Hz at 20°C For capacitors with more than 1000μF, add 0.02 for every increase of 1000μF.							Rated voltage (V)	6.3	10	16	25	35	50	tan δ (MAX.)	0.30	0.26	0.22	0.18	0.16	0.14									
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Stability at Low Temperature	<table><tr><td colspan="2">Rated voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td rowspan="2">tan δ (MAX.)</td><td>Z-25°C / Z+20°C</td><td>5</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z-40°C / Z+20°C</td><td>10</td><td>8</td><td>6</td><td>4</td><td>3</td><td>3</td></tr></table> Measurement frequency : 120Hz							Rated voltage (V)		6.3	10	16	25	35	50	tan δ (MAX.)	Z-25°C / Z+20°C	5	4	3	2	2	2	Z-40°C / Z+20°C	10	8	6	4	3	3
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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 105°C.				<table><tr><td>Capacitance Change</td><td>Within ± 20% of the initial capacitance value</td></tr><tr><td>tan δ</td><td>200% or less than the initial specified value</td></tr><tr><td>Leakage current</td><td>Less than or equal to the initial specified value</td></tr></table>			Capacitance Change	Within ± 20% of the initial capacitance value	tan δ	200% or less than the initial specified value	Leakage current	Less than or equal to the initial specified value																	
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Shelf Life	After storing the capacitors under no load at 105°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	Printed with black color letter on pearl blue sleeve.																													

Radial Lead Type



Type numbering system (Example : 16V 1000µF)



Dimensions

Cap (µF)	V	6.3	10	16	25	35	50
Code		0J	1A	1C	1E	1V	1H
22	220	5 × 11	45	5 × 11	45	5 × 11	54
33	330	5 × 11	55	5 × 11	58	5 × 11	65
47	470	5 × 11	65	5 × 11	68	5 × 11	79
100	101	5 × 11	95	5 × 11	105	5 × 11	115
220	221	6.3 × 11	160	6.3 × 11	175	6.3 × 11	190
330	331	6.3 × 11	195	8 × 11.5	240	8 × 11.5	265
470	471	8 × 11.5	270	8 × 11.5	280	8 × 11.5	315
1000	102	10 × 12.5	420	10 × 16	500	10 × 16	560
2200	222	10 × 20	710	12.5 × 20	810	12.5 × 20	920
3300	332	12.5 × 20	910	12.5 × 25	1050	12.5 × 31.5	1270
4700	472	12.5 × 25	1120	12.5 × 35.5	1300	12.5 × 35.5	1480
6800	682	12.5 × 35.5	1360	12.5 × 40	1570	16 × 31.5	1780
10000	103	12.5 × 40	1650	16 × 35.5	1890	18 × 35.5	2060
15000	153	16 × 35.5	2010	18 × 40	2400		
22000	223	18 × 40	2350				

Frequency coefficient of rated ripple current

Cap. (µF)	Frequency	50Hz	120Hz	300Hz	1kHz	10kHz or more
22 to 47		0.75	1.00	1.35	1.57	2.00
100 to 470		0.80	1.00	1.23	1.34	1.50
1000 to 22000		0.85	1.00	1.10	1.13	1.15

Rated ripple current (mA rms) at 105°C 120Hz

Design, Specifications are subject to change without notice.

NICHICON CORPORATION

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