

ALUMINUM ELECTROLYTIC CAPACITORS



Lug / Snap-in Terminal Type,
For Audio Equipment
series

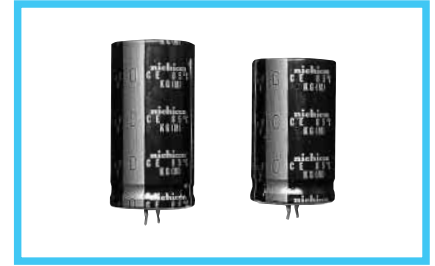


- Designed for high grade audio equipment, giving priority to high fidelity sound quality.
- The variation expansion of the KG series.
- TYPE- I : The low profile high tone quality grade of the new development electrolyte adoption.
- TYPE- II : The center grade that the best sound is provided electrode foil, with the multiple use.
- TYPE- III : The highest tone quality grade by the low drag the gold plating terminal adoption.
- The sound quality that it meets the high tone quality needs of the DVD age.
- Available for adapted to the RoHS directive (2002/95/EC).

Super Through

High Grade

Gold Tune



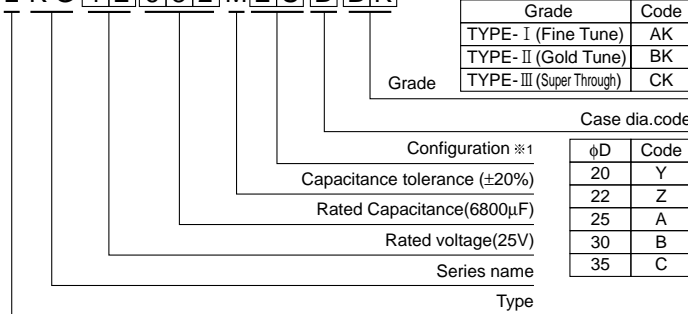
Specifications

Item	Performance Characteristics																	
Category Temperature Range	- 40 ~ +85°C																	
Rated Voltage Range	16 ~ 100V (TYPE- I • TYPE- II), 50~100V (TYPE- III)																	
Rated Capacitance Range	680 ~ 33000μF																	
Capacitance Tolerance	±20% at 120Hz, 20°C																	
Leakage Current	After 5 minutes' application of rated voltage, leakage current is not more than $3\sqrt{CV}$ (μA), [C: Rated Capacitance(μF), V: Voltage (V)]																	
tan δ	Measurement frequency : 120Hz, Temperature : 20°C																	
	<table border="1"> <thead> <tr> <th>TYPE</th> <th colspan="3">TYPE- I • TYPE- II</th> <th colspan="2">TYPE- III</th> </tr> </thead> <tbody> <tr> <td>Rated voltage(V)</td> <td>16</td> <td>25 • 63</td> <td>80 • 100</td> <td>50 • 63</td> <td>80 • 100</td> </tr> <tr> <td>tan δ (MAX.)</td> <td>0.35</td> <td>0.30</td> <td>0.25</td> <td>0.22</td> <td>0.20</td> </tr> </tbody> </table>	TYPE	TYPE- I • TYPE- II			TYPE- III		Rated voltage(V)	16	25 • 63	80 • 100	50 • 63	80 • 100	tan δ (MAX.)	0.35	0.30	0.25	0.22
TYPE	TYPE- I • TYPE- II			TYPE- III														
Rated voltage(V)	16	25 • 63	80 • 100	50 • 63	80 • 100													
tan δ (MAX.)	0.35	0.30	0.25	0.22	0.20													
Stability at Low Temperature	Rated voltage(V)	16~100	Measurement frequency : 120Hz															
	Impedance ratio ZT/Z20(MAX.)	<table border="1"> <tbody> <tr> <td>Z - 25°C/Z+20°C</td> <td>4</td> </tr> <tr> <td>Z - 40°C/Z+20°C</td> <td>12</td> </tr> </tbody> </table>		Z - 25°C/Z+20°C	4	Z - 40°C/Z+20°C	12											
Z - 25°C/Z+20°C	4																	
Z - 40°C/Z+20°C	12																	
Endurance	After 1000 hours application of rated voltage at 85°C, capacitors meet the characteristic requirements listed at right.	Capacitance change	Within ±20% of initial value															
		tan δ	200% or less of initial specified value															
		Leakage current	Initial specified value or less															
Shelf Life	After leaving capacitors under no load at 85°C for 1000 hours, they meet the specified value for endurance characteristics listed above.																	
Marking	Printed with gold color letter on black sleeve																	

Type numbering system (Snap-in terminal type)

(Example : Gold Tune 25 V 6800μF, Dia.φ30)

1 2 3 4 5 6 7 8 9 10 11 12 13 14
L K G 1 E 6 8 2 M E S B B K



※ 1 Configuration

Pb-free terminal	Sn-Pb finished terminal
Pb-free PET sleeve	PVC sleeve (containing Pb)
ES	HS

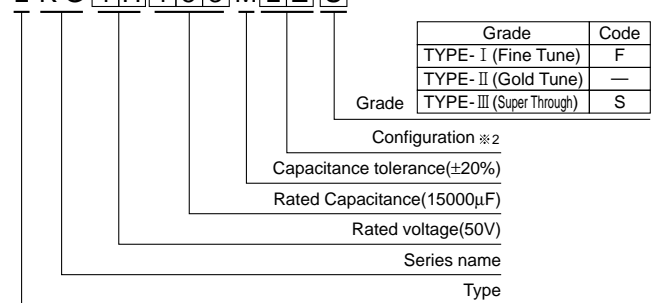
Note: The lead core material will change from the current brass to steel when lead finishing type I and II is changed from the current Sn-Pb to the environmentally friendly Pb-free lead finishing

※ Please contact to us if other configurations are required.

Type numbering system (Lug terminal type)

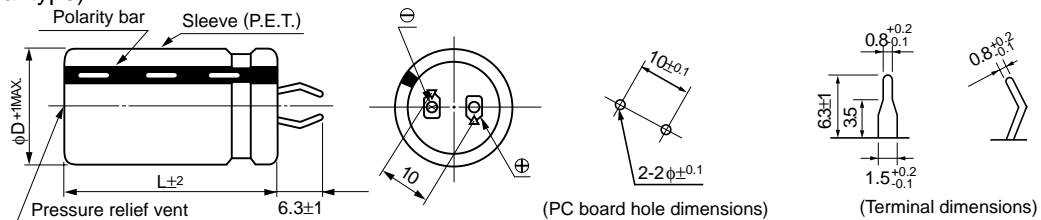
(Example : Super Through 50 V 15000μF)

1 2 3 4 5 6 7 8 9 10 11 12
L K G 1 H 1 5 3 M L Z S

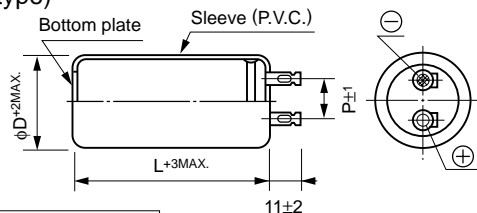


※ Please contact to us if Eco-products are required.

(Snap-in terminal type)

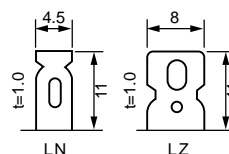


(Lug terminal type)



Configuration

φ35 ~ φ40 φ50~φ76



	(mm)				
φD	35	40	50	63	76
P	14	14	18	25	25
Configuration	LN		LZ		

● Dimension table in next page.

ALUMINUM ELECTROLYTIC CAPACITORS



■Dimensions (Snap-in Terminal Type : Gold Tune)

φ D×L (mm)

Cap.(μF)	Code	Grade	16V (1C)					25V (1E)					35V (1V)					50V (1H)				
			φ20	φ22	φ25	φ30	φ35	φ20	φ22	φ25	φ30	φ35	φ20	φ22	φ25	φ30	φ35	φ20	φ22	φ25	φ30	φ35
820	821	TYPE- II																22×20				
																		1.00				
1000	102	TYPE- II																20×25		25×20		
																		1.50		1.50		
1200	122	TYPE- II																22×20		22×25		
																		1.30		1.65		
1500	152	TYPE- I																22×20				
																		1.55				
		TYPE- II																20×25		22×30		30×20
																		1.40		1.80		1.80
1800	182	TYPE- I																20×25				25×20
																		1.70				1.65
		TYPE- II																22×20				25×25
																		1.40				2.15
2200	222	TYPE- I																22×20				20×30
																		1.45				1.85
		TYPE- II																20×25		25×20		20×30
																		1.50		1.50		1.75
2700	272	TYPE- I																20×25		25×20		20×35
																		1.60		1.55		2.00
		TYPE- II																20×30		22×25		20×35
																		1.70		1.70		2.05
3300	332	TYPE- I																22×20				20×30
																		1.50				1.75
		TYPE- II																22×20		22×30		20×40
																		1.80		1.80		2.25
3900	392	TYPE- I																20×25		25×20		20×40
																		1.60		1.55		1.85
		TYPE- II																20×25		25×25		20×40
																		1.55		2.10		2.40
4700	472	TYPE- I																22×20				20×35
																		1.35				2.20
		TYPE- II																20×30		22×25		20×35
																		1.75		1.75		2.20
5600	562	TYPE- I																20×25				20×40
																		1.45				2.40
		TYPE- II																20×30		22×40		22×35
																		1.85		2.50		2.35
6800	682	TYPE- I																25×20				20×50
																		1.70				2.50
		TYPE- II																20×35		22×30		22×40
																		2.20		2.20		2.60
8200	822	TYPE- I																20×30		22×25		20×50
																		1.90				2.90
		TYPE- II																20×40		22×35		22×45
																		2.40		2.30		2.90
10000	103	TYPE- I																20×35		25×25		25×45
																		2.05		2.00		3.05
		TYPE- II																20×50		25×35		30×35
																		2.65		2.45		3.80
12000	123	TYPE- I																20×40		25×30		25×50
																		2.25		2.15		3.45
		TYPE- II																22×50		30×30		30×40
																		2.75		2.75		3.30
15000	153	TYPE- I																20×45		25×35		30×45
																		2.60		2.50		3.80
		TYPE- II																25×45		30×35		35×35
																		3.10		3.10		4.80
18000	183	TYPE- I																22×45		25×40		30×50
																		2.80		2.65		4.30
		TYPE- II																25×50		30×40		35×40
																		3.50		3.40		4.15
22000	223	TYPE- I																25×45		30×35		35×45
																		2.95		2.90		4.70
		TYPE- II																30×45		35×35		
																		3.80		3.80		
27000	273	TYPE- I																25×50		30×40		35×40
																		3.40		3.25		4.30
		TYPE- II																30×50		35×40		
																		4.25		4.25		
33000	333	TYPE- I																30×45		35×35		
																		3.70		3.65		4.85
		TYPE- II																35×45				
																		4.50				

Rated ripple (A rms) at 85°C 120 Hz

CAT.8100U

ALUMINUM ELECTROLYTIC CAPACITORS



■Dimensions (Snap-in Terminal Type : Gold Tune)

φD×L (mm)

Cap.(μF)	Code	Grade	63V (1J)					80V (1K)					100V (2A)						
			φ20	φ22	φ25	φ30	φ35	φ20	φ22	φ25	φ30	φ35	φ20	φ22	φ25	φ30	φ35		
680	681	TYPE- I											20×30 1.70	22×25 1.75					
		TYPE- II											20×40 2.15	22×35 2.15	25×30 2.10				
		TYPE- III	20×30 1.75	22×25 1.75				20×45 2.10	22×35 2.25	25×30 2.15					22×45 2.65	25×35 2.70			
820	821	TYPE- I				30×20 1.90						20×35 1.85	22×30 1.85	25×25 1.80	30×20 1.90				
		TYPE- II	20×25 1.65		25×20 1.65			20×35 2.05	22×30 2.05	25×25 2.00	30×20 2.05		20×45 2.40	22×40 2.40		30×25 2.35	35×20 2.45		
		TYPE- III	20×35 1.90	22×30 1.90	25×25 1.85			20×50 2.40	22×40 2.45	25×35 2.35	30×25 2.40	35×20 2.55		22×50 3.00	25×40 3.00	30×30 3.00	35×25 2.85		
1000	102	TYPE- I	20×25 1.45					20×30 1.80	22×25 1.85						20×40 2.05				
		TYPE- II	20×30 1.85	22×25 1.85				20×45 2.20	22×35 2.20	25×30 2.15			35×20 2.10		22×45 2.70	25×35 2.75			
		TYPE- III	20×40 2.10	22×35 2.05	25×30 2.00			22×50 2.60	25×40 2.60	30×30 2.60					25×50 3.10	30×35 3.30	35×30 3.05		
1200	122	TYPE- I			25×20 1.65			20×35 1.95	22×30 1.95	25×25 1.90	30×20 1.95		20×45 2.30	22×40 2.35	25×30 2.30	30×25 2.20	35×20 2.30		
		TYPE- II	20×35 1.95	22×30 1.95	25×25 1.90	30×20 1.95		20×50 2.45	22×40 2.45	25×35 2.30	30×25 2.40			22×50 3.00	25×40 2.75	30×30 3.05	35×25 2.90		
		TYPE- III	20×45 2.35	22×40 2.25		30×25 2.20	35×20 2.30			25×45 2.85	30×35 2.80	35×25 2.95				30×40 3.60	35×35 3.30		
1500	152	TYPE- I	20×30 1.90	22×25 1.90				20×40 2.20	22×35 2.15	25×30 2.10				20×50 2.65	22×45 2.55	25×35 2.60			
		TYPE- II	20×40 2.15	22×35 2.15	25×30 2.10			22×50 2.60	25×40 2.65	30×30 2.65					25×50 3.20	30×35 3.40	35×30 3.20		
		TYPE- III		22×45 2.60	25×35 2.65				25×50 3.30	30×40 3.20	35×30 3.25					30×50 3.90	35×40 3.75		
1800	182	TYPE- I	20×35 2.05	22×30 2.00	25×25 2.00	30×20 2.05		20×45 2.45	22×40 2.35				30×25 2.40	35×20 2.50		22×50 2.85	25×40 2.85	30×30 2.90	35×25 2.75
		TYPE- II	20×45 2.35	22×40 2.35		30×25 2.35	35×20 2.45			25×45 2.85	30×35 2.85	35×25 3.00				30×40 3.70	35×35 3.40		
		TYPE- III		22×50 2.90	25×40 2.90	30×30 2.90	35×25 2.75				30×45 3.55	35×35 3.50					35×45 4.15		
2200	222	TYPE- I	20×40 2.25	22×35 2.20	25×30 2.15	30×25 2.10			22×45 2.70	25×35 2.75	30×30 2.55					25×45 3.20	30×35 3.20	35×30 3.00	
		TYPE- II		22×45 2.70	25×35 2.75	30×30 2.50				25×50 3.25	30×40 3.15	35×30 3.25				30×50 3.95	35×40 3.80		
		TYPE- III			25×45 3.25	30×35 3.20					30×50 4.05	35×40 3.90					35×50 4.75		
2700	272	TYPE- I	20×50 2.40	22×40 2.45	25×35 2.35	30×25 2.50							30×35 2.80	35×25 3.00			30×40 3.55	35×35 3.25	
		TYPE- II			25×45 2.80	30×35 2.75	35×25 2.95						30×45 3.60	35×35 3.55				35×45 4.30	
		TYPE- III				30×45 3.30	35×30 3.65							35×45 4.45					
3300	332	TYPE- I		22×45 2.80	25×40 2.60	30×30 2.70				25×50 3.25	30×40 3.15	35×30 3.20					30×50 3.75		
		TYPE- II			25×50 3.20	30×40 3.20	35×30 3.15				30×50 4.10	35×40 3.95						35×50 4.95	
		TYPE- III				30×50 3.80	35×35 4.00					35×50 5.05							
3900	392	TYPE- I			25×45 2.85	30×35 2.85	35×25 3.00						30×45 3.45	35×35 3.40				35×40 4.30	
		TYPE- II				30×45 3.35	35×35 3.35						35×45 4.35						
		TYPE- III					35×40 4.30												
4700	472	TYPE- I			25×50 3.20	30×40 3.10	35×30 3.20						30×45 3.85	35×40 3.75				35×50 4.50	
		TYPE- II				30×50 3.80								35×50 4.85					
		TYPE- III					35×50 4.50												
5600	562	TYPE- I				30×45 3.45	35×35 3.40							35×45 4.10					
		TYPE- II					35×40 4.35												
6800	682	TYPE- I					30×50 3.90	35×40 3.75						35×50 4.65					
		TYPE- II						35×50 4.60											
8200	822	TYPE- I						35×45 4.20											
10000	103	TYPE- I							35×50 4.80										

Rated ripple (A rms) at 85°C 120 Hz

■Dimensions (Lug Terminal Type : Gold Tune, Super Through)

φD×L (mm)

Cap.(μF)	Code	Grade	50 (1H)	63 (1J)	80 (1K)	100 (2A)	
6800	682	TYPE- I				40×68	
		TYPE- II				50×80	
		TYPE- III	40×80	5.5	40×100	6.1	50×100
10000	103	TYPE- I				40×68	
		TYPE- II	35×80	4.6	40×80	4.9	50×80
		TYPE- III	40×100	6.1	50×80	6.2	63×80
15000	153	TYPE- I				40×68	
		TYPE- II	40×80	6.1	40×100	6.7	50×100
		TYPE- III	50×100	8.4	63×80	8.7	63×100
22000	223	TYPE- I	40×68	5.4	40×100	6.6	50×100
		TYPE- II	50×80	8.3	50×100	9.1	63×100
		TYPE- III	63×80	10.5	63×100	11.6	76×100

Rated ripple (A rms) at 85°C 120 Hz

CAT.8100U