

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

For Audio Use

- 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 for HD Audio equipment.
- Compliant to the RoHS directive (2002/95/EC).

Super Through

High Grade

Gold Tune

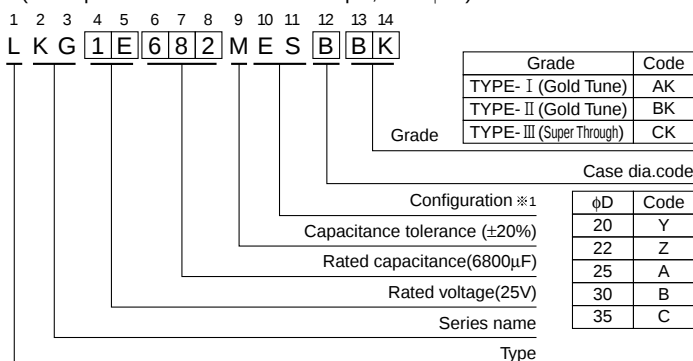


■ Specifications

Item	Performance Characteristics						
Category Temperature Range	－ 40 to +85℃						
Rated Voltage Range	16 to 100V (TYPE-Ⅰ , TYPE-Ⅱ , TYPE-Ⅲ)						
Rated Capacitance Range	680 to 33000μF						
Capacitance Tolerance	± 20% at 120Hz, 20℃						
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)]						
Tangent of loss angle (tan δ)	For capacitance of more than 22000μF, add 0.02 for every increase of 1000μF. Measurement frequency : 120Hz, Temperature : 20℃						
	TYPE	TYPE-Ⅰ , TYPE-Ⅱ			TYPE-Ⅲ		
	Rated voltage(V)	16	25 to 63	80・100	16	25 to 63	80・100
	tan δ (MAX.)	0.35	0.30	0.25	0.25	0.22	0.20
Stability at Low Temperature	Rated voltage(V)			16 to 100	Measurement frequency : 120Hz		
	Impedance ratio ZT/Z20(MAX.)		Z－25℃/Z+20℃	4			
			Z－40℃/Z+20℃	12			
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20℃ after the rated voltage is applied for 1000 hours at 85℃.			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			
Shelf Life	After storing the capacitors under no load at 85℃ for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20℃, they shall meet the specified values for the 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)

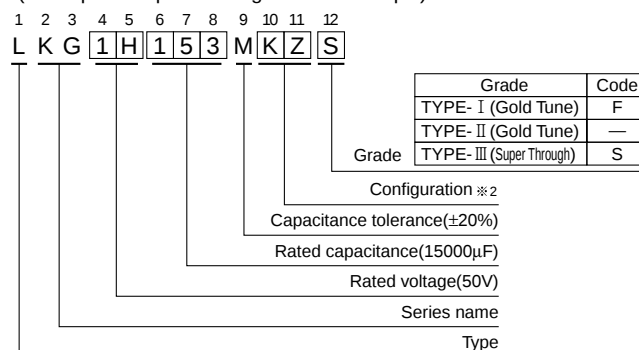


※1 Configuration

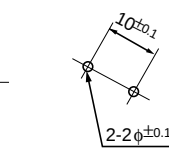
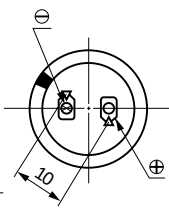
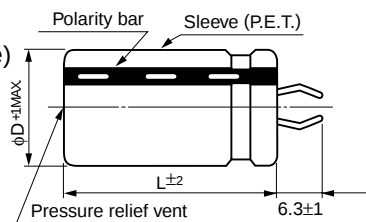
Pb-free terminal
Pb-free PET sleeve
ES

Type numbering system (Lug terminal type)

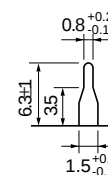
(Example : Super Through 50 V 15000μF)



(Snap-in terminal type)



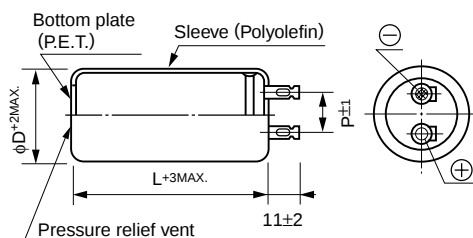
(PC board hole dimensions)



(Terminal dimensions)

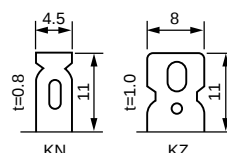
※2

(Lug terminal type)



■ Configuration

φ35 to φ40 φ50 to φ76



φD	35	40	50	63	76
P	14	14	18	25	25
Configuration	K N		K Z		

● Dimension table in next page.

CAT.8100Y

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

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
680	681	TYPE- III						20×20 0.65										20×30 1.05	22×25 1.00			
820	821	TYPE- II																22×20 1.00				
		TYPE- III						22×20 0.75					20×25 0.85		25×20 0.85				22×30 1.40	25×25 1.35	30×20 1.35	
1000	102	TYPE- II											20×30 1.05	22×25 1.00				20×25 1.50		25×20 1.50		
		TYPE- III	20×20 0.90							25×20 0.95								20×35 1.80	22×20 1.30			
1200	122	TYPE- II																20×30 1.65	22×25 1.65			
		TYPE- III		22×20 0.95				20×25 1.20					20×35 1.45	22×30 1.45	25×25 1.40	30×20 1.40		20×40 1.95		25×30 1.95	30×25 1.90	35×20 1.90
1500	152	TYPE- I																22×20 1.55				
		TYPE- II											20×25 1.40	22×40 1.55	25×30 1.50			20×35 1.80	22×30 1.80		30×20 1.80	
		TYPE- III	20×25 1.10		25×20 1.10			20×30 1.30			30×20 1.30		20×40 1.55	22×35 1.55				20×50 2.20	22×45 2.20	25×35 2.15	30×30 2.15	
1800	182	TYPE- I																20×25 1.70		25×20 1.65		
		TYPE- II						20×20 1.35							22×25 1.55	25×20 1.65			25×25 2.15			
		TYPE- III		22×25 1.20				20×35 1.60		25×25 1.55			20×45 1.80	22×40 1.75		30×25 1.75	35×20 1.70		22×50 2.45	25×40 2.45		35×25 2.40
2200	222	TYPE- I																20×30 1.85	22×25 1.85			
		TYPE- II	20×20 1.10					20×25 1.50		25×20 1.50			20×30 1.75	22×40 1.95	25×35 1.95	30×30 1.95		20×45 2.35	22×35 2.35	25×30 2.30		35×20 2.25
		TYPE- III	20×30 1.35			30×20 1.35		20×40 1.85	22×35 1.85	25×30 1.80	30×25 1.80	35×20 1.75	20×50 2.00	22×45 1.95	25×40 1.95			20×55 2.65	22×45 2.65	25×40 2.60	30×35 2.60	35×30 2.60
2700	272	TYPE- I																20×35 2.00	22×30 2.00	25×25 1.95	30×20 2.05	
		TYPE- II						20×30 1.70	22×25 1.70				20×35 2.05	22×30 2.05	25×25 2.00	30×20 2.05		20×50 2.45	22×45 2.45	25×35 2.50	30×25 2.60	
		TYPE- III	20×35 1.75		25×25 1.75			20×50 2.20	22×45 2.20	25×35 2.15			20×55 2.35	22×45 2.35	25×40 2.30	35×25 2.30		20×60 2.75	22×50 2.75	25×45 2.80	30×45 3.00	35×35 2.95
3300	332	TYPE- I											20×30 1.75	22×25 1.75				20×40 2.25	22×35 2.20			
		TYPE- II		22×20 1.50				20×35 1.80	22×30 1.80		30×20 1.85		20×40 2.25	22×35 2.25	25×30 2.20				22×50 2.80	25×40 2.80	30×30 2.80	
		TYPE- III	20×40 2.00		25×30 2.00	35×20 1.95		22×50 2.50	25×40 2.45	30×30 2.40	35×25 2.45				25×50 2.70	30×40 2.70	35×30 2.65	20×45 2.45	22×40 2.35	25×30 2.50	30×35 2.35	35×20 2.45
3900	392	TYPE- I																20×45 2.40	22×40 2.40	25×35 2.30	35×20 2.50	
		TYPE- II	20×25 1.55		25×20 1.55				25×25 2.10				20×45 2.40	22×40 2.40	25×35 2.30				25×45 3.00	25×35 3.00	30×35 3.00	35×25 3.15
		TYPE- III	20×50 2.30	22×45 2.30	25×35 2.35	30×25 2.35			25×45 2.80	30×35 2.80					30×45 3.00	35×35 3.00		20×55 2.75	22×45 2.60	25×35 2.70	30×40 3.30	35×45 3.50
4700	472	TYPE- I		22×20 1.35				20×30 1.70	22×25 1.70				20×35 2.20	22×30 2.20	25×25 2.15			20×50 2.75	22×45 2.60	25×35 2.70		
		TYPE- II	20×30 1.75	22×25 1.75				20×45 2.30	22×35 2.30	25×30 2.25		35×20 2.20		22×45 2.70			30×30 2.55		25×50 3.40	25×40 3.40	30×40 3.30	35×30 3.35
		TYPE- III		22×50 2.75	25×40 2.70	30×30 2.70	35×25 2.60				30×40 3.25	35×30 3.15		20×40 2.40	22×35 2.35	25×30 2.25	35×20 2.25		22×50 2.90	25×40 2.90	30×30 3.00	35×25 2.85
5600	562	TYPE- I	20×25 1.45								30×20 1.85											
		TYPE- II				30×20 1.85		20×50 2.50	22×40 2.50	25×35 2.40	30×25 2.50											
		TYPE- III			25×45 2.90	30×35 2.90					30×45 3.50	35×35 3.50		22×50 3.00	25×40 3.00							
6800	682	TYPE- I			25×20 1.70			20×35 2.20	22×30 2.20	25×25 2.15			20×50 2.50	22×40 2.60		30×25 2.60				25×45 3.30	30×35 3.25	
		TYPE- II	20×35 2.20	22×30 2.20	25×25 2.15			22×50 2.65	25×40 2.65	30×30 2.65					25×50 3.10	30×35 3.30	35×30 3.05				30×50 4.10	35×40 3.95
		TYPE- III			25×50 3.20	30×40 3.20	35×30 3.15					35×40 3.80					35×50 4.15					
8200	822	TYPE- I	20×30 1.90	22×25 1.90				20×40 2.40	22×35 2.35	25×30 2.30		35×20 2.25		22×45 2.90	25×40 2.70		30×30 2.75				30×40 3.55	35×30 3.65
		TYPE- II	20×40 2.40	22×35 2.40	25×30 2.30					25×45 2.90	30×35 2.85	35×25 3.05				30×40 3.60	35×35 3.30					35×45 4.40
		TYPE- III			30×45 3.35	35×35 3.30						35×45 4.00										
10000	103	TYPE- I	20×35 2.05	22×30 2.05	25×25 2.00	30×20 2.10		20×50 2.55	22×40 2.65	25×35 2.50	30×25 2.65				25×45 3.05	30×35 3.00	35×25 3.20				30×45 4.00	35×35 4.00
		TYPE- II	20×50 2.65	22×40 2.65	25×35 2.45	30×25 2.50				25×50 3.30	30×40 3.30	35×30 3.30				30×50 3.80	35×40 3.70					35×50 5.05
		TYPE- III				35×40 3.50																
12000	123	TYPE- I	20×40 2.25	22×35 2.20	25×30 2.15		35×20 2.10		22×45 2.90	25×40 2.75	30×30 2.80	35×25 2.65			25×50 3.45	30×40 3.30	35×30 3.40					35×40 4.35
		TYPE- II		22×50 2.75	25×40 2.75	30×30 2.75	35×25 2.60				30×45 3.55	35×35 3.50					35×45 4.10					
		TYPE- III					35×45 3.70															
15000	153	TYPE- I	20×45 2.60	22×40 2.50	25×35 2.40	30×25 2.50				25×45 3.15	30×35 3.10					30×45 3.80	35×35 3.80					35×50 4.70
		TYPE- II			25×45 3.10	30×35 3.10						35×40 4.00					35×50 4.80					
18000	183	TYPE- I		22×45 2.80	25×40 2.60	30×30 2.65				25×50 3.55	30×40 3.40	35×30 3.50				30×50 4.30	35×40 4.15					
		TYPE- II			25×50 3.50	30×40 3.40	35×30 3.45					35×45 4.45										
22000	223	TYPE- I			25×45 2.95	30×35 2.90	35×25 2.90				30×45 3.85	35×35 3.85					35×45 4.70					
		TYPE- II				30×45 3.80	35×35 3.80															
27000	273	TYPE- I			25×50 3.40	30×40 3.25	35×30 3.35					35×40 4.30										
		TYPE- II				30×50 4.25	35×40 4.25															
33000	333	TYPE- I				30×45 3.70	35×35 3.65					35×45 4.85										
		TYPE- II					35×45 4.50															Case Size φD×L (mm) Rated ripple

Rated ripple current (Arms) at 85°C 120 Hz

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

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	---	30×20 1.90	---	20×45 2.10	22×35 2.25	25×30 2.15	---	---	---	22×45 2.65	25×35 2.70	---	---
820	821	TYPE- I	---	22×20 1.30	---	---	---	20×25 1.70	22×30 2.05	25×20 1.65	---	---	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 3.10	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 2.00	---	20×45 2.30	22×40 2.20	25×30 2.35	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	30×20 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	---	---	---	---	---	---	---	---	---	Case size φD × L (mm) Rated ripple

Rated ripple current (Arms) at 85°C 120 Hz

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

Cap.(F)	Code	Grade	50 (1H)		63 (1J)		80 (1K)		100 (2A)	
6800	682	TYPE- I							40×68	5.1
		TYPE- II			35×68	4.3	40×100	6.1	50×80	6.2
		TYPE- III	40 ×80	5.5	40×100	6.1	50×80	6.7	50×100	7.3
10000	103	TYPE- I					40×68	5.4	40×100	6.0
		TYPE- II	35×80	4.6	40×80	4.9	50×80	6.2	50×100	6.9
		TYPE- III	40×100	6.1	50×80	6.2	63×80	7.6	63×100	8.3
15000	153	TYPE- I			40×68	5.6	40×100	6.5	50×100	7.4
		TYPE- II	40×80	6.1	40×100	6.7	50×100	8.4	63×80	8.7
		TYPE- III	50×100	8.4	63×80	8.7	63×100	10.1	76×100	11.3
22000	223	TYPE- I	40×68	5.4	40×100	6.6	50×100	7.8	63×80	9.7
		TYPE- II	50×80	8.3	50×100	9.1	63×100	11.6	76×100	12.9
		TYPE- III	63×80	10.5	63×100	11.6	76×100	13.7	Case size φD × L (mm)	Rated ripple

Rated ripple current (Arms) at 85°C 120 Hz