

KHJ Series

- Higher ripple current from KMT series
- Endurance with ripple current : 3,000 hours at 105°C
- Rated voltage range : 400 to 450V_{dc}, Capacitance range : 240 to 820μF
- For inverter control, switching power supplies
- Non solvent resistant type
- RoHS2 Compliant

KHJ

Higher ripple

KMT

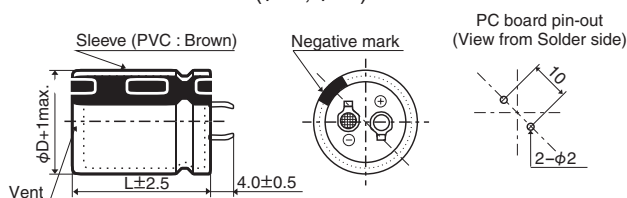


◆SPECIFICATIONS

Items	Characteristics			
Category	-40 to +105℃			
Temperature Range				
Rated Voltage Range	400 to 450V _{dc}			
Capacitance Tolerance	± 20% (M) (at 20℃, 120Hz)			
Leakage Current	I ≤ 3√CV Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20℃ after 5 minutes)			
Dissipation Factor (tan δ)	Rated voltage (V _{dc})	400V	420 & 450V	(at 20℃, 120Hz)
	tan δ (Max.)	0.15	0.20	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	400V	420 & 450V	
	Z(-25℃)/Z(+20℃)	3	8	
	Z(-40℃)/Z(+20℃)	12	14	(at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 3,000 hours at 105℃.			
	Capacitance change	≤ ±20% of the initial value		
	D.F. (tan δ)	≤ 200% of the initial specified value		
	Leakage current	≤ The initial specified value		
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.			
	Capacitance change	≤ ± 15% of the initial value		
	D.F. (tan δ)	≤ 150% of the initial specified value		
	Leakage current	≤ The initial specified value		

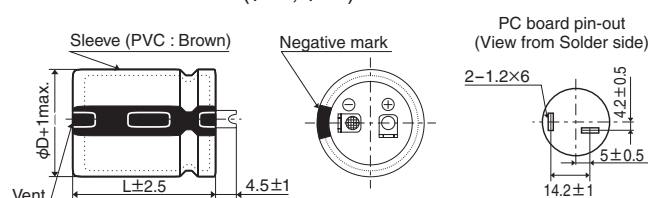
◆DIMENSIONS [mm]

- Terminal Code : VS (φ30, φ35) : Standard

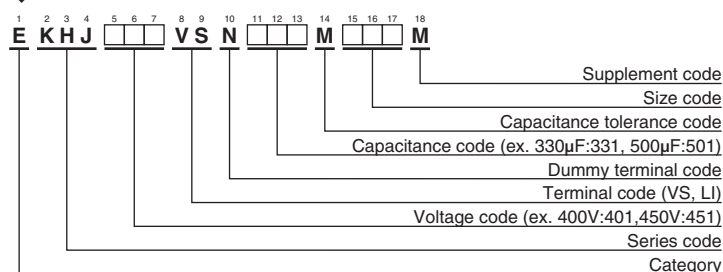


The standard design has no plastic disc.

- Terminal Code : LI (φ30, φ35)



◆PART NUMBERING SYSTEM



Please refer to "Product code guide (snap-in type)"



◆STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.	WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.
400	280	30 × 35	0.15	2.32	EKHJ401VSN281MR35M	420	440	35 × 41	0.20	2.99	EKHJ421VSN441MA41M
	360	30 × 41	0.15	2.71	EKHJ401VSN361MR41M		490	30 × 59	0.20	3.28	EKHJ421VSN491MR59M
	410	30 × 46	0.15	2.96	EKHJ401VSN411MR46M		500	35 × 46	0.20	3.27	EKHJ421VSN501MA46M
	410	35 × 35	0.15	2.96	EKHJ401VSN411MA35M		590	35 × 51	0.20	3.64	EKHJ421VSN591MA51M
	480	30 × 51	0.15	3.27	EKHJ401VSN481MR51M		630	35 × 54	0.20	3.80	EKHJ421VSN631MA54M
	510	35 × 41	0.15	3.43	EKHJ401VSN511MA41M		710	35 × 59	0.20	4.10	EKHJ421VSN711MA59M
	520	30 × 54	0.15	3.44	EKHJ401VSN521MR54M	450	240	30 × 35	0.20	2.12	EKHJ451VSN241MR35M
	570	30 × 59	0.15	3.67	EKHJ401VSN571MR59M		290	30 × 41	0.20	2.35	EKHJ451VSN291MR41M
	580	35 × 46	0.15	3.75	EKHJ401VSN581MA46M		330	30 × 46	0.20	2.57	EKHJ451VSN331MR46M
	680	35 × 51	0.15	4.15	EKHJ401VSN681MA51M		330	35 × 35	0.20	2.50	EKHJ451VSN331MA35M
	740	35 × 54	0.15	4.38	EKHJ401VSN741MA54M		380	30 × 51	0.20	2.81	EKHJ451VSN381MR51M
	820	35 × 59	0.15	4.69	EKHJ401VSN821MA59M		410	30 × 54	0.20	2.96	EKHJ451VSN411MR54M
420	250	30 × 35	0.20	2.12	EKHJ421VSN251MR35M		410	35 × 41	0.20	2.89	EKHJ451VSN411MA41M
	310	30 × 41	0.20	2.43	EKHJ421VSN311MR41M		460	30 × 59	0.20	3.18	EKHJ451VSN461MR59M
	350	35 × 35	0.20	2.57	EKHJ421VSN351MA35M		460	35 × 46	0.20	3.14	EKHJ451VSN461MA46M
	360	30 × 46	0.20	2.68	EKHJ421VSN361MR46M		550	35 × 51	0.20	3.51	EKHJ451VSN551MA51M
	420	30 × 51	0.20	2.96	EKHJ421VSN421MR51M		590	35 × 54	0.20	3.68	EKHJ451VSN591MA54M
	440	30 × 54	0.20	3.06	EKHJ421VSN441MR54M		660	35 × 59	0.20	3.95	EKHJ451VSN661MA59M

◆RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

Frequency(Hz)	50	120	300	1k	10k	50k
400 to 450V	0.72	1.00	1.21	1.38	1.48	1.46

The deterioration of aluminum electrolytic capacitors accelerates their life due to the internal heating produced by ripple current. For details, refer to Section "5-3 Ripple Current Effect on Lifetime" in the catalog, Technical Note.



- Always read "Notes on Use" before using the product in order to enable you to use the product correctly and prevent any faults and accidents from occurring.
- Request the Product Specification on the product of NIPPON CHEMI-CON CORPORATION to refer to it as well as this brochure prior to the order of the products. Some specific notes on use of the ordered product may be described in the specifications.
- The products listed in this catalog are designed and manufactured for general electronics equipment use and are not intended for use in applications that can adversely affect human life; where the malfunction of equipment may cause damage to life or property. In addition, our products are not intended to be used in specific applications that may cause a major social impact. Please consult with us in advance of usage of our products in the following listed applications. ① Aerospace equipment ② Power generation equipment such as thermal power, nuclear power etc. ③ Medical equipment ④ Transport equipment (automobiles, trains, ships, etc.) ⑤ Transportation control equipment ⑥ Disaster prevention / crime prevention equipment ⑦ Highly publicized information processing equipment ⑧ Submarine equipment ⑨ Other applications that are not considered general-purpose applications.
- The circuits described as examples in this catalog and the "delivery specifications" are featured in order to show the operations and usage of our products, however, this fact does not guarantee that the circuits are available to function in your equipment systems. We are not in any case responsible for any failures or damage caused by the use of information contained herein. You should examine our products, of which the characteristics are described in the "delivery specifications" and other documents, and determine whether or not our products suit your requirements according to the specifications of your equipment systems. Therefore, you bear final responsibility regarding the use of our products.
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- We reserve the right to discontinue production and delivery of products. We do not guarantee that all the products included in this catalog will be available in the future.
The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products
- We continually strive to improve the quality and reliability of our products, but in any case that our product does not meet our published specifications, please stop using it promptly and contact us immediately. As for compensation for non-conforming goods delivered by Chemi-Con, we will limit it only to goods found in non-compliance of our published specifications. This may be accomplished by a no cost replacement of non-conforming individual products, a credit of the piece price paid per each individual non-conforming product, or in other ways deemed necessary.
In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

[Part Numbering System](#)

[Part Numbering System \(Appendix\)](#)

[Standardization](#)

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[Available Terminals for Snap-in and Screw Mount Type](#)