KMT Series

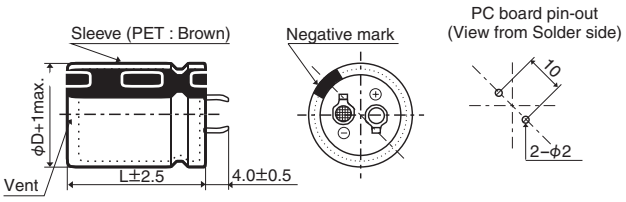
- Higher ripple current from KMS series
- Endurance with ripple current : 3,000 hours at 105℃
- Rated voltage range : 420, 450Vdc, Capacitance range : 82 to 680µF
- For inverter control, switching power supplies
- Non solvent resistant type
- RoHS2 Compliant

◆SPECIFICATIONS

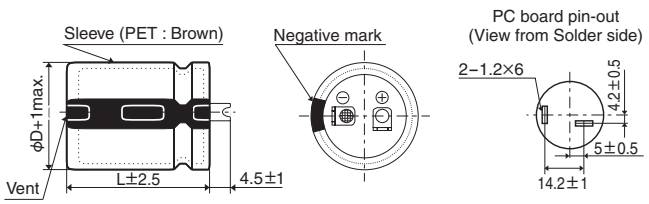
Items	Characteristics		
Category Temperature Range	-25 to +105℃		
Rated Voltage Range	420, 450Vdc		
Capacitance Tolerance	±20% (M)		(at 20℃, 120Hz)
Leakage Current	I≦3√CV Where, I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (V)		(at 20℃ after 5 minutes)
Dissipation Factor (tan δ)	Rated voltage (Vdc)	420 & 450V	
	tan δ (Max.)	0.20	(at 20℃, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (Vdc)	420 & 450V	
	Z(-25℃)/Z(+20℃)	8	(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 (ϕ22 to ϕ35) : Standard

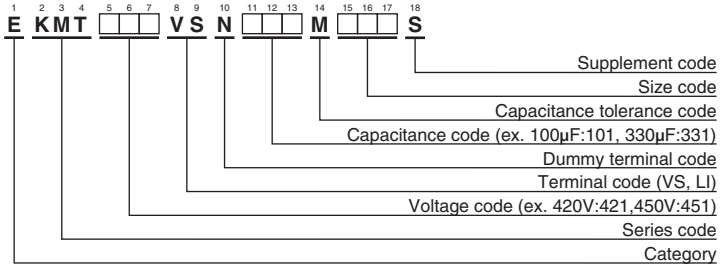


●Terminal Code : LI (ϕ35)



The standard design has no plastic disc.

◆PART NUMBERING SYSTEM



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

KMT Series

◆STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105℃, 120Hz)	Part No.
420	100	22 × 25	0.20	0.89	EKMT421VSN101MP25S
	120	22 × 30	0.20	1.06	EKMT421VSN121MP30S
	120	25.4 × 25	0.20	1.09	EKMT421VSN121MQ25S
	150	22 × 35	0.20	1.21	EKMT421VSN151MP35S
	180	22 × 40	0.20	1.34	EKMT421VSN181MP40S
	180	25.4 × 30	0.20	1.28	EKMT421VSN181MQ30S
	180	30 × 25	0.20	1.42	EKMT421VSN181MR25S
	220	22 × 45	0.20	1.47	EKMT421VSN221MP45S
	220	22 × 50	0.20	1.60	EKMT421VSN221MP50S
	220	25.4 × 35	0.20	1.47	EKMT421VSN221MQ35S
	220	30 × 30	0.20	1.64	EKMT421VSN221MR30S
	220	35 × 25	0.20	1.64	EKMT421VSN221MA25S
	270	25.4 × 40	0.20	1.63	EKMT421VSN271MQ40S
	270	25.4 × 45	0.20	1.79	EKMT421VSN271MQ45S
	270	30 × 35	0.20	1.87	EKMT421VSN271MR35S
	330	25.4 × 50	0.20	1.93	EKMT421VSN331MQ50S
	330	30 × 40	0.20	2.10	EKMT421VSN331MR40S
	330	35 × 30	0.20	2.05	EKMT421VSN331MA30S
	390	30 × 45	0.20	2.32	EKMT421VSN391MR45S
	390	35 × 35	0.20	2.32	EKMT421VSN391MA35S
	470	30 × 50	0.20	2.51	EKMT421VSN471MR50S
	470	35 × 40	0.20	2.62	EKMT421VSN471MA40S
	560	35 × 45	0.20	2.88	EKMT421VSN561MA45S
	680	35 × 50	0.20	3.10	EKMT421VSN681MA50S

WV (V_{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105℃, 120Hz)	Part No.
450	82	22 × 25	0.20	0.81	EKMT451VSN820MP25S
	100	22 × 30	0.20	0.97	EKMT451VSN101MP30S
	100	25.4 × 25	0.20	1.04	EKMT451VSN101MQ25S
	120	22 × 35	0.20	1.08	EKMT451VSN121MP35S
	150	22 × 40	0.20	1.22	EKMT451VSN151MP40S
	150	25.4 × 35	0.20	1.31	EKMT451VSN151MQ35S
	150	30 × 25	0.20	1.31	EKMT451VSN151MR25S
	180	22 × 45	0.20	1.35	EKMT451VSN181MP45S
	180	22 × 50	0.20	1.42	EKMT451VSN181MP50S
	180	25.4 × 40	0.20	1.35	EKMT451VSN181MQ40S
	180	30 × 30	0.20	1.49	EKMT451VSN181MR30S
	180	35 × 25	0.20	1.60	EKMT451VSN181MA25S
	220	25.4 × 45	0.20	1.55	EKMT451VSN221MQ45S
	220	30 × 35	0.20	1.71	EKMT451VSN221MR35S
	270	25.4 × 50	0.20	1.74	EKMT451VSN271MQ50S
	270	30 × 40	0.20	1.90	EKMT451VSN271MR40S
	270	35 × 30	0.20	1.90	EKMT451VSN271MA30S
	330	30 × 45	0.20	2.20	EKMT451VSN331MR45S
	330	35 × 35	0.20	2.20	EKMT451VSN331MA35S
	390	30 × 50	0.20	2.40	EKMT451VSN391MR50S
	390	35 × 40	0.20	2.42	EKMT451VSN391MA40S
	470	35 × 45	0.20	2.67	EKMT451VSN471MA45S
	560	35 × 50	0.20	2.85	EKMT451VSN561MA50S

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency(Hz)	50	120	300	1k	10k	50k
420, 450V_{dc}	0.68	1.00	1.16	1.30	1.41	1.43

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.
Please make sure that you take appropriate safety measures such as use of redundant design and malfunction prevention measures in order to prevent fatal accidents and/or fires in the event any of our products malfunction.

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The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products

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In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

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