

- Downsized from KMR series
- Endurance with ripple current: 2,000 hours at 105°C
- Rated voltage range: 400 to 450V_{dc}, Capacitance range: 120 to 1,000μF
- Non solvent resistant type
- RoHS2 Compliant



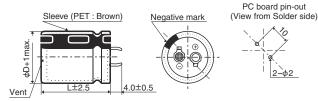


SPECIFICATIONS

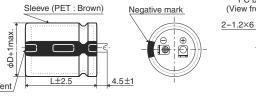
Items	Characteristics									
Category Temperature Range	-25 to +105°C									
Rated Voltage Range	400 to 450V _{do}									
Capacitance Tolerance	±20% (M) (at 20℃, 120Hz)									
Leakage Current	I ≤ $3\sqrt{CV}$ Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 5 minutes)									
Dissipation Factor	Rated voltage (Vdc)	400V	420 & 450V							
$(\tan \delta)$	tan δ (Max.)	0.15	0.20	(at 20℃, 120Hz)						
Low Temperature	Rated voltage (Vdc)	400 to 450V								
Characteristics	Z(-25°C)/Z(+20°C)	8								
(Max. Impedance Ratio)			•	(at 120Hz)						
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 2,000 hours at 105°C.									
	Capacitance change	≦±20% of the ini	tial value							
	D.F. (tan δ)	≦200% of the initi	al specified value							
	Leakage current	rrent ≦The initial specified value								
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C 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 ini	tial value							
	D.F. (tan δ)	≤150% of the initi	al specified value							
	Leakage current	≦The initial specif	ied value							

◆DIMENSIONS [mm]

●Terminal Code : VS (φ22 to φ35) : Standard



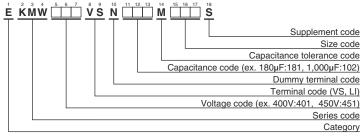
■Terminal Code : LI (φ35)



PC board pin-out (View from Solder side)

The standard design has no plastic disc.

◆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.
	150	22 × 25	0.15	0.91	EKMW401VSN151MP25S		330	35 × 25	0.20	1.38	EKMW421VSN331MA25S
	180	22 × 30	0.15	1.04	EKMW401VSN181MP30S		390	25.4×45	0.20	1.67	EKMW421VSN391MQ45S
	220	22 × 35	0.15	1.18	EKMW401VSN221MP35S		390	25.4×50	0.20	1.70	EKMW421VSN391MQ50S
	220	25.4 × 25	0.15	1.15	EKMW401VSN221MQ25S		390	30 × 35	0.20	1.59	EKMW421VSN391MR35S
	270	25.4 × 30	0.15	1.31	EKMW401VSN271MQ30S	420	470	30 × 40	0.20	1.79	EKMW421VSN471MR40S
	330	22 × 45	0.15	1.50	EKMW401VSN331MP45S		470	35 × 30	0.20	1.67	EKMW421VSN471MA30S
	330	25.4×35	0.15	1.51	EKMW401VSN331MQ35S		560	30 × 45	0.20	2.01	EKMW421VSN561MR45S
	330	30 × 25	0.15	1.46	EKMW401VSN331MR25S		560	35 × 35	0.20	1.85	EKMW421VSN561MA35S
	390	22 × 50	0.15	1.67	EKMW401VSN391MP50S		680	35 × 40	0.20	2.11	EKMW421VSN681MA40S
	390	25.4×40	0.15	1.67	EKMW401VSN391MQ40S		120	22 × 25	0.20	0.78	EKMW451VSN121MP25S
400	390	30 × 30	0.15	1.61	EKMW401VSN391MR30S		150	22 × 30	0.20	0.91	EKMW451VSN151MP30S
	390	35 × 25	0.15	1.40	EKMW401VSN391MA25S		150	25.4 × 25	0.20	0.93	EKMW451VSN151MQ25S
	470	25.4 × 45	0.15	1.87	EKMW401VSN471MQ45S		180	22 × 35	0.20	1.02	EKMW451VSN181MP35S
	470	30 × 35	0.15	1.81	EKMW401VSN471MR35S		180	25.4 × 30	0.20	1.05	EKMW451VSN181MQ30S
	560	30 × 40	0.15	2.03	EKMW401VSN561MR40S		220	22 × 40	0.20	1.15	EKMW451VSN221MP40S
	560	35 × 30	0.15	1.70	EKMW401VSN561MA30S		220	25.4 × 35	0.20	1.21	EKMW451VSN221MQ35S
	680	30 × 45	0.15	2.29	EKMW401VSN681MR45S		220	30 × 25	0.20	1.15	EKMW451VSN221MR25S
	680	30 × 50	0.15	2.33	EKMW401VSN681MR50S		270	22 × 50	0.20	1.36	EKMW451VSN271MP50S
	680	35 × 35	0.15	1.90	EKMW401VSN681MA35S		270	25.4 × 40	0.20	1.36	EKMW451VSN271MQ40S
	820	35 × 40	0.15	2.16	EKMW401VSN821MA40S	450	270	30 × 30	0.20	1.29	EKMW451VSN271MR30S
	1,000	35 × 50	0.15	2.50	EKMW401VSN102MA50S	450	330	25.4 × 45	0.20	1.54	EKMW451VSN331MQ45S
	120	22 × 25	0.20	0.78	EKMW421VSN121MP25S		330	30 × 35	0.20	1.46	EKMW451VSN331MR35S
	150	22 × 30	0.20	0.91	EKMW421VSN151MP30S		390	25.4 × 50	0.20	1.70	EKMW451VSN391MQ50S
420	180	25.4 × 25	0.20	1.02	EKMW421VSN181MQ25S		390	30 × 40	0.20	1.63	EKMW451VSN391MR40S
	220	25.4 × 30	0.20	1.16	EKMW421VSN221MQ30S		390	35 × 30	0.20	1.52	EKMW451VSN391MA30S
	270	22 × 45	0.20	1.30	EKMW421VSN271MP45S		470	30 × 45	0.20	1.85	EKMW451VSN471MR45S
	270	25.4×35	0.20	1.34	EKMW421VSN271MQ35S		470	35 × 35	0.20	1.77	EKMW451VSN471MA35S
	270	30 × 25	0.20	1.28	EKMW421VSN271MR25S		560	30 × 50	0.20	2.04	EKMW451VSN561MR50S
	330	22 × 50	0.20	1.47	EKMW421VSN331MP50S		560	35 × 40	0.20	2.02	EKMW451VSN561MA40S
	330	25.4 × 40	0.20	1.51	EKMW421VSN331MQ40S		680	35 × 45	0.20	2.16	EKMW451VSN681MA45S
	330	30 × 30	0.20	1.43	EKMW421VSN331MR30S		820	35 × 50	0.20	2.42	EKMW451VSN821MA50S

PRATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Frequency(Hz)	50	120	300	1k	10k	50k
400 to 450V _{dc}	0.77	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.
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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.

Part Numbering System
Part Numbering System (Appendix)
Standardization
Available Items by Manufacturing Locations
Environmental Measures
Technical Note
Precautions and Guidelines
Recommended Soldering Conditions
Taping, Lead-preforming and Packaging
Available Terminals for Snap-in and Screw Mount Type