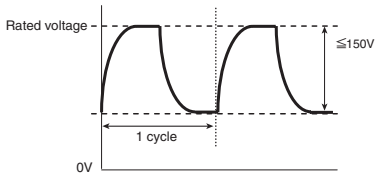
KMV Series

- For frequently change of regenerative voltage from AC servo amplifier and inverter control
- Ideal use to power supply, specially power source with turn on and off frequently and highly voltage fluctuation
- Improved the resistance for charge and discharge from same dimension of KMQ series
- Endurance with ripple current : 3,000 hours at 105℃
- Rated voltage range : 350 to 450Vdc, Capacitance 82 to 1,200μF
- Non solvent resistant type
- **RoHS Compliant**

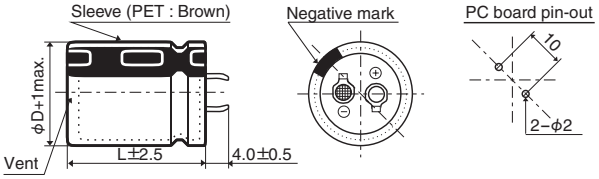
◆SPECIFICATIONS

Items	Characteristics			
Category Temperature Range	−25 to +105℃			
Rated Voltage Range	350 to 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 (tanδ)	Rated voltage (Vdc)	350 & 400V	420 & 450V	
	tanδ (Max.)	0.15	0.20	(at 20℃, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (Vdc)	350 to 450V		
	Z(−25℃)/Z(+20℃)	8		(at 120Hz)
Charge and Discharge	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to charge and discharge test with the voltage waveform shown below at room temperature (15 to 35℃).			
	Capacitance change	≦±20% of the initial value		
	D.F. (tanδ)	≦200% of the initial specified value		
	Leakage current	≦The initial specified value		
	Frequency	6Hz		
	Number of cycles	50 million times		
	Voltage waveform			
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. (tanδ)	≦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. (tanδ)	≦150% of the initial specified value		
	Leakage current	≦The initial specified value		

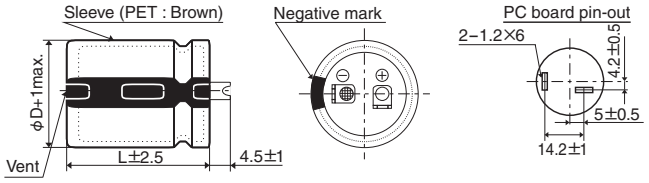
*Please consult with us about charge and discharge conditions.

◆DIMENSIONS [mm]

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



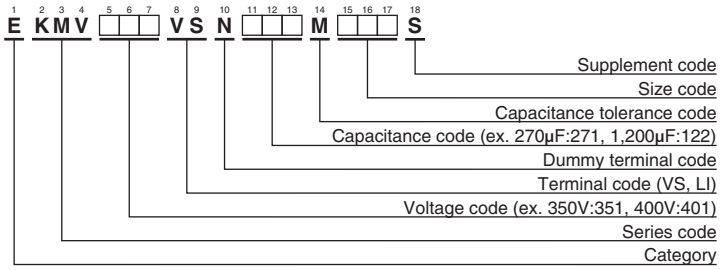
●Terminal Code : LI (φ35)



No plastic disk is the standard design.

KMV Series

◆PART NUMBERING SYSTEM



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

◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	Rated ripple current (Arms/ 105℃,120Hz)	Max. charge current and Max.discharge current (Arms/ 6Hz)	Part No.
350	120	22×25	0.74	0.42	EKMV351VSN121MP25S
	150	22×30	0.87	0.49	EKMV351VSN151MP30S
	180	25.4×25	0.92	0.54	EKMV351VSN181MQ25S
	220	22×35	1.08	0.60	EKMV351VSN221MP35S
	220	22×40	1.10	0.62	EKMV351VSN221MP40S
	220	25.4×30	1.05	0.61	EKMV351VSN221MQ30S
	270	22×45	1.24	0.71	EKMV351VSN271MP45S
	270	25.4×35	1.21	0.70	EKMV351VSN271MQ35S
	270	30×25	1.15	0.68	EKMV351VSN271MR25S
	330	22×50	1.41	0.80	EKMV351VSN331MP50S
	330	25.4×40	1.37	0.80	EKMV351VSN331MQ40S
	330	30×30	1.29	0.77	EKMV351VSN331MR30S
	330	35×25	1.31	0.78	EKMV351VSN331MA25S
	390	25.4×45	1.51	0.89	EKMV351VSN391MQ45S
	390	30×35	1.44	0.88	EKMV351VSN391MR35S
	470	25.4×50	1.69	0.99	EKMV351VSN471MQ50S
	470	30×40	1.62	1.00	EKMV351VSN471MR40S
	470	35×30	1.61	0.97	EKMV351VSN471MA30S
	560	30×45	1.82	1.12	EKMV351VSN561MR45S
	560	35×35	1.77	1.08	EKMV351VSN561MA35S
	680	30×50	2.04	1.27	EKMV351VSN681MR50S
	680	35×40	2.02	1.25	EKMV351VSN681MA40S
	820	35×45	2.27	1.41	EKMV351VSN821MA45S
	820	35×50	2.32	1.46	EKMV351VSN821MA50S
	1,200	35×60	2.88	1.84	EKMV351VSN122MA60S
400	100	22×25	0.69	0.38	EKMV401VSN101MP25S
	120	22×30	0.79	0.44	EKMV401VSN121MP30S
	150	25.4×25	0.87	0.49	EKMV401VSN151MQ25S
	180	22×35	0.99	0.55	EKMV401VSN181MP35S
	180	22×40	1.01	0.56	EKMV401VSN181MP40S
	180	25.4×30	0.98	0.55	EKMV401VSN181MQ30S
	220	22×45	1.14	0.64	EKMV401VSN221MP45S
	220	25.4×35	1.13	0.63	EKMV401VSN221MQ35S
	220	30×25	1.10	0.61	EKMV401VSN221MR25S
	270	22×50	1.30	0.73	EKMV401VSN271MP50S
	270	25.4×40	1.28	0.72	EKMV401VSN271MQ40S
	270	30×30	1.22	0.70	EKMV401VSN271MR30S
	270	35×25	1.26	0.71	EKMV401VSN271MA25S
	330	25.4×45	1.44	0.82	EKMV401VSN331MQ45S
	330	30×35	1.38	0.81	EKMV401VSN331MR35S
	390	25.4×50	1.59	0.91	EKMV401VSN391MQ50S
	390	30×40	1.55	0.91	EKMV401VSN391MR40S
	390	35×30	1.55	0.89	EKMV401VSN391MA30S
	470	30×45	1.74	1.03	EKMV401VSN471MR45S
	470	35×35	1.71	1.00	EKMV401VSN471MA35S
	560	30×50	1.93	1.15	EKMV401VSN561MR50S
	560	35×40	1.94	1.14	EKMV401VSN561MA40S
	680	35×45	2.19	1.29	EKMV401VSN681MA45S
	820	35×50	2.45	1.44	EKMV401VSN821MA50S
	1,000	35×60	2.79	1.70	EKMV401VSN102MA60S

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	Rated ripple current (Arms/ 105℃,120Hz)	Max. charge current and Max.discharge current (Arms/ 6Hz)	Part No.
420	82	22×25	0.64	0.34	EKMV421VSN820MP25S
	120	22×30	0.81	0.44	EKMV421VSN121MP30S
	120	25.4×25	0.81	0.44	EKMV421VSN121MQ25S
	150	22×35	0.93	0.50	EKMV421VSN151MP35S
	150	25.4×30	0.93	0.50	EKMV421VSN151MQ30S
	180	22×40	1.04	0.56	EKMV421VSN181MP40S
	180	22×45	1.06	0.58	EKMV421VSN181MP45S
	180	25.4×35	1.06	0.58	EKMV421VSN181MQ35S
	180	30×25	1.02	0.56	EKMV421VSN181MR25S
	220	22×50	1.20	0.66	EKMV421VSN221MP50S
	220	25.4×40	1.20	0.65	EKMV421VSN221MQ40S
	220	30×30	1.14	0.63	EKMV421VSN221MR30S
	270	25.4×45	1.36	0.74	EKMV421VSN271MQ45S
	270	30×35	1.29	0.73	EKMV421VSN271MR35S
	270	35×25	1.26	0.71	EKMV421VSN271MA25S
	330	25.4×50	1.52	0.83	EKMV421VSN331MQ50S
	330	30×40	1.47	0.84	EKMV421VSN331MR40S
	330	35×30	1.42	0.82	EKMV421VSN331MA30S
	390	30×45	1.64	0.94	EKMV421VSN391MR45S
	390	35×35	1.56	0.91	EKMV421VSN391MA35S
	470	30×50	1.83	1.06	EKMV421VSN471MR50S
	470	35×40	1.78	1.05	EKMV421VSN471MA40S
	560	35×45	1.98	1.18	EKMV421VSN561MA45S
	680	35×50	2.23	1.34	EKMV421VSN681MA50S
	820	35×60	2.52	1.55	EKMV421VSN821MA60S
450	82	22×25	0.64	0.34	EKMV451VSN820MP25S
	100	22×30	0.72	0.40	EKMV451VSN101MP30S
	100	25.4×25	0.72	0.40	EKMV451VSN101MQ25S
	120	22×35	0.81	0.45	EKMV451VSN121MP35S
	150	22×40	0.93	0.51	EKMV451VSN151MP40S
	150	25.4×30	0.91	0.50	EKMV451VSN151MQ30S
	150	30×25	0.90	0.51	EKMV451VSN151MR25S
	180	22×45	1.03	0.58	EKMV451VSN181MP45S
	180	22×50	1.06	0.59	EKMV451VSN181MP50S
	180	25.4×35	1.04	0.57	EKMV451VSN181MQ35S
	220	25.4×40	1.18	0.65	EKMV451VSN221MQ40S
	220	25.4×45	1.20	0.67	EKMV451VSN221MQ45S
	220	30×30	1.10	0.63	EKMV451VSN221MR30S
	220	35×25	1.12	0.64	EKMV451VSN221MA25S
	270	25.4×50	1.35	0.75	EKMV451VSN271MQ50S
	270	30×35	1.25	0.73	EKMV451VSN271MR35S
	270	35×30	1.27	0.74	EKMV451VSN271MA30S
	330	30×40	1.42	0.84	EKMV451VSN331MR40S
	330	30×45	1.46	0.87	EKMV451VSN331MR45S
	330	35×35	1.41	0.84	EKMV451VSN331MA35S
	390	30×50	1.61	0.97	EKMV451VSN391MR50S
	390	35×40	1.59	0.96	EKMV451VSN391MA40S
	470	35×45	1.79	1.08	EKMV451VSN471MA45S
	560	35×50	2.00	1.22	EKMV451VSN561MA50S
	680	35×60	2.26	1.42	EKMV451VSN681MA60S

KMV Series

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency(Hz)	50	120	300	1k	10k	50k
Coefficient	0.77	1.00	1.16	1.30	1.41	1.43

The endurance of capacitors is shorted with internal heating produced by ripple current at the rate of halving the lifetime with every 5℃ rise.
When long life performance is required in actual use, the rms ripple current has to be reduced.