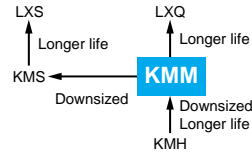


# KMM Series

- Downsized, longer life, and high ripple version of KMH series
- Endurance with ripple current : 2,000 to 3,000 hours at 105°C
- Non solvent resistant type
- RoHS Compliant

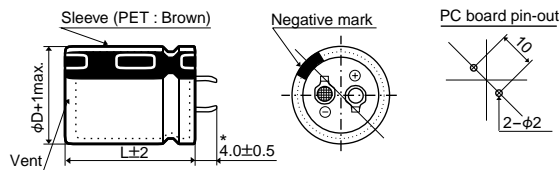


## ◆ SPECIFICATIONS

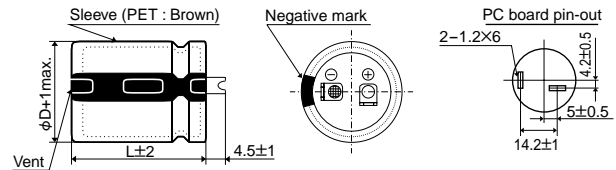
Items	Characteristics	
Category	-25 to +105°C	
Temperature Range		
Rated Voltage Range	160 to 450V <sub>dc</sub>	
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)	
Leakage Current	I ≤ 3√CV Where, I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (V) (at 20°C after 5 minutes)	
Dissipation Factor (tanδ)	Rated voltage (V <sub>dc</sub> )	160 to 400V 420 & 450V
	tanδ (Max.)	0.15 0.20 (at 20°C, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	160 to 400V 420 & 450V
	Z(-25°C)/Z(+20°C)	4 8 (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 for 3,000 hours (2,000 hours for φ20×20L products) at 105°C.	
	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°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 initial value
	D.F. (tanδ)	≤ 150% of the initial specified value
	Leakage current	≤ The initial specified value

## ◆ DIMENSIONS [mm]

- Terminal Code : VS (φ20 to φ35) : Standard



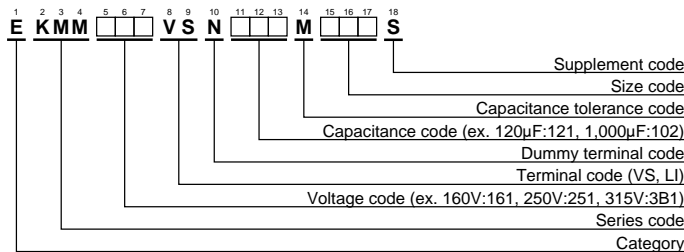
- Terminal Code : LI (φ35)



\*φD=35mm : 3.5±0.5mm

The standard design has no plastic disc.

## ◆ PART NUMBERING SYSTEM



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

### ◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tanδ	Rated ripple current (Arms/105°C,120Hz)	Part No.	WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tanδ	Rated ripple current (Arms/105°C,120Hz)	Part No.
160	180	20×20	0.15	0.68	EKMM161VSN181MN20S	180	560	20×45	0.15	1.55	EKMM181VSN561MN45S
	220	20×25	0.15	0.85	EKMM161VSN221MN25S		560	22×40	0.15	1.67	EKMM181VSN561MP40S
	220	22×20	0.15	0.81	EKMM161VSN221MP20S		560	25.4×30	0.15	1.67	EKMM181VSN561MQ30S
	270	20×25	0.15	1.10	EKMM161VSN271MN25S		560	30×25	0.15	1.67	EKMM181VSN561MR25S
	270	25.4×20	0.15	0.98	EKMM161VSN271MQ20S		560	35×20	0.15	1.43	EKMM181VSN561MA20S
	330	20×30	0.15	1.20	EKMM161VSN331MN30S		680	20×50	0.15	1.75	EKMM181VSN681MN50S
	330	22×25	0.15	1.20	EKMM161VSN331MP25S		680	22×45	0.15	1.78	EKMM181VSN681MP45S
	330	25.4×20	0.15	1.02	EKMM161VSN331MQ20S		680	25.4×35	0.15	1.78	EKMM181VSN681MQ35S
	390	20×30	0.15	1.30	EKMM161VSN391MN30S		680	30×30	0.15	1.78	EKMM181VSN681MR30S
	390	22×25	0.15	1.30	EKMM161VSN391MP25S		680	35×25	0.15	1.83	EKMM181VSN681MA25S
	390	25.4×25	0.15	1.26	EKMM161VSN391MQ25S		820	22×50	0.15	2.04	EKMM181VSN821MP50S
	390	30×20	0.15	1.25	EKMM161VSN391MR20S		820	25.4×40	0.15	2.04	EKMM181VSN821MQ40S
	470	20×35	0.15	1.34	EKMM161VSN471MN35S		820	30×30	0.15	2.04	EKMM181VSN821MR30S
	470	22×30	0.15	1.55	EKMM161VSN471MP30S		820	35×25	0.15	2.04	EKMM181VSN821MA25S
	470	25.4×25	0.15	1.55	EKMM161VSN471MQ25S		1,000	25.4×45	0.15	2.30	EKMM181VSN102MQ45S
	470	30×20	0.15	1.30	EKMM161VSN471MR20S		1,000	30×35	0.15	2.30	EKMM181VSN102MR35S
	560	20×40	0.15	1.50	EKMM161VSN561MN40S		1,000	35×30	0.15	2.30	EKMM181VSN102MA30S
	560	22×35	0.15	1.67	EKMM161VSN561MP35S		1,200	25.4×50	0.15	2.55	EKMM181VSN122MQ50S
	560	25.4×30	0.15	1.67	EKMM161VSN561MQ30S		1,200	30×40	0.15	2.55	EKMM181VSN122MR40S
	560	30×25	0.15	1.67	EKMM161VSN561MR25S		1,200	35×30	0.15	2.55	EKMM181VSN122MA30S
	560	35×20	0.15	1.46	EKMM161VSN561MA20S		1,500	30×45	0.15	2.90	EKMM181VSN152MR45S
	680	20×45	0.15	1.70	EKMM161VSN681MN45S		1,500	35×35	0.15	2.90	EKMM181VSN152MA35S
	680	22×40	0.15	1.82	EKMM161VSN681MP40S		1,800	30×60	0.15	3.49	EKMM181VSN182MR60S
	680	25.4×30	0.15	1.82	EKMM161VSN681MQ30S		1,800	35×40	0.15	3.30	EKMM181VSN182MA40S
	680	30×25	0.15	1.82	EKMM161VSN681MR25S		2,200	35×50	0.15	3.65	EKMM181VSN222MA50S
	680	35×20	0.15	1.51	EKMM161VSN681MA20S		2,700	35×60	0.15	4.19	EKMM181VSN272MA60S
	820	22×45	0.15	2.04	EKMM161VSN821MP45S		120	20×20	0.15	0.56	EKMM201VSN121MN20S
	820	25.4×35	0.15	2.04	EKMM161VSN821MQ35S		150	20×25	0.15	0.71	EKMM201VSN151MN25S
	820	30×30	0.15	2.04	EKMM161VSN821MR30S		150	22×20	0.15	0.73	EKMM201VSN151MP20S
	820	35×25	0.15	2.04	EKMM161VSN821MA25S		180	20×25	0.15	0.77	EKMM201VSN181MN25S
	1,000	22×50	0.15	2.25	EKMM161VSN102MP50S		180	22×20	0.15	0.80	EKMM201VSN181MP20S
	1,000	25.4×40	0.15	2.25	EKMM161VSN102MQ40S		220	20×25	0.15	1.00	EKMM201VSN221MN25S
	1,000	30×30	0.15	2.25	EKMM161VSN102MR30S		220	25.4×20	0.15	0.85	EKMM201VSN221MQ20S
	1,000	35×25	0.15	2.25	EKMM161VSN102MA25S		270	20×30	0.15	1.10	EKMM201VSN271MN30S
	1,200	25.4×45	0.15	2.49	EKMM161VSN122MQ45S		270	22×25	0.15	1.10	EKMM201VSN271MP25S
	1,200	30×35	0.15	2.49	EKMM161VSN122MR35S		270	30×20	0.15	1.05	EKMM201VSN271MR20S
	1,200	35×30	0.15	2.49	EKMM161VSN122MA30S		330	20×35	0.15	1.20	EKMM201VSN331MN35S
	1,500	25.4×60	0.15	2.97	EKMM161VSN152MQ60S		330	22×30	0.15	1.25	EKMM201VSN331MP30S
	1,500	30×40	0.15	2.84	EKMM161VSN152MR40S		330	25.4×25	0.15	1.25	EKMM201VSN331MQ25S
	1,500	35×30	0.15	2.84	EKMM161VSN152MA30S		330	30×20	0.15	1.10	EKMM201VSN331MR20S
	1,800	30×45	0.15	3.32	EKMM161VSN182MR45S		390	20×40	0.15	1.31	EKMM201VSN391MN40S
	1,800	35×35	0.15	3.00	EKMM161VSN182MA35S		390	22×30	0.15	1.35	EKMM201VSN391MP30S
2,200	30×60	0.15	3.86	EKMM161VSN222MR60S	390	25.4×25	0.15	1.35	EKMM201VSN391MQ25S		
2,200	35×45	0.15	3.50	EKMM161VSN222MA45S	390	35×20	0.15	1.30	EKMM201VSN391MA20S		
2,700	35×50	0.15	4.00	EKMM161VSN272MA50S	470	20×45	0.15	1.45	EKMM201VSN471MN45S		
3,300	35×60	0.15	4.63	EKMM161VSN332MA60S	470	22×35	0.15	1.50	EKMM201VSN471MP35S		
180	150	20×20	0.15	0.62	EKMM181VSN151MN20S	470	25.4×30	0.15	1.50	EKMM201VSN471MQ30S	
	180	20×25	0.15	0.77	EKMM181VSN181MN25S	470	30×25	0.15	1.50	EKMM201VSN471MR25S	
	180	22×20	0.15	0.80	EKMM181VSN181MP20S	470	35×20	0.15	1.41	EKMM201VSN471MA20S	
	220	20×25	0.15	1.00	EKMM181VSN221MN25S	560	20×50	0.15	1.58	EKMM201VSN561MN50S	
	220	25.4×20	0.15	0.90	EKMM181VSN221MQ20S	560	22×40	0.15	1.67	EKMM201VSN561MP40S	
	270	20×30	0.15	1.10	EKMM181VSN271MN30S	560	25.4×30	0.15	1.67	EKMM201VSN561MQ30S	
	270	22×25	0.15	1.00	EKMM181VSN271MP25S	560	30×25	0.15	1.67	EKMM201VSN561MR25S	
	270	25.4×20	0.15	0.95	EKMM181VSN271MQ20S	680	22×45	0.15	1.78	EKMM201VSN681MP45S	
	330	20×30	0.15	1.20	EKMM181VSN331MN30S	680	25.4×35	0.15	1.78	EKMM201VSN681MQ35S	
	330	22×25	0.15	1.20	EKMM181VSN331MP25S	680	30×30	0.15	1.78	EKMM201VSN681MR30S	
	330	25.4×25	0.15	1.16	EKMM181VSN331MQ25S	680	35×25	0.15	1.78	EKMM201VSN681MA25S	
	330	30×20	0.15	1.15	EKMM181VSN331MR20S	820	25.4×45	0.15	2.04	EKMM201VSN821MQ45S	
	390	20×35	0.15	1.30	EKMM181VSN391MN35S	820	30×30	0.15	2.04	EKMM201VSN821MR30S	
	390	22×30	0.15	1.35	EKMM181VSN391MP30S	820	35×25	0.15	2.04	EKMM201VSN821MA25S	
	390	25.4×25	0.15	1.35	EKMM181VSN391MQ25S	1,000	25.4×50	0.15	2.30	EKMM201VSN102MQ50S	
	390	30×20	0.15	1.20	EKMM181VSN391MR20S	1,000	30×35	0.15	2.30	EKMM201VSN102MR35S	
	470	20×40	0.15	1.40	EKMM181VSN471MN40S	1,000	35×30	0.15	2.30	EKMM201VSN102MA30S	
	470	22×35	0.15	1.50	EKMM181VSN471MP35S	1,200	25.4×60	0.15	2.66	EKMM201VSN122MQ60S	
	470	25.4×30	0.15	1.50	EKMM181VSN471MQ30S	1,200	30×40	0.15	2.65	EKMM201VSN122MR40S	
	470	30×25	0.15	1.50	EKMM181VSN471MR25S	1,200	35×35	0.15	2.65	EKMM201VSN122MA35S	
	470	35×20	0.15	1.36	EKMM181VSN471MA20S	1,500	30×50	0.15	3.08	EKMM201VSN152MR50S	

### ◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φDXL(mm)	tanδ	Rated ripple current (Arms/105°C,120Hz)	Part No.	WV (Vdc)	Cap (μF)	Case size φDXL(mm)	tanδ	Rated ripple current (Arms/105°C,120Hz)	Part No.	
200	1,500	35 × 40	0.15	3.08	EKMM201VSN152MA40S	250	330	30 × 25	0.15	1.30	EKMM251VSN331MR25S	
	1,800	30 × 60	0.15	3.49	EKMM201VSN182MR60S		330	35 × 20	0.15	1.16	EKMM251VSN331MA20S	
	1,800	35 × 45	0.15	3.48	EKMM201VSN182MA45S		390	20 × 50	0.15	1.45	EKMM251VSN391MN50S	
	2,200	35 × 50	0.15	3.78	EKMM201VSN222MA50S		390	22 × 40	0.15	1.49	EKMM251VSN391MP40S	
220	120	20 × 20	0.15	0.56	EKMM221VSN121MN20S		390	25.4 × 35	0.15	1.49	EKMM251VSN391MQ35S	
	150	20 × 25	0.15	0.73	EKMM221VSN151MN25S		390	30 × 25	0.15	1.49	EKMM251VSN391MR25S	
	150	22 × 20	0.15	0.67	EKMM221VSN151MP20S		470	22 × 45	0.15	1.65	EKMM251VSN471MP45S	
	180	20 × 25	0.15	0.90	EKMM221VSN181MN25S		470	25.4 × 35	0.15	1.65	EKMM251VSN471MQ35S	
	180	25.4 × 20	0.15	0.76	EKMM221VSN181MQ20S		470	30 × 30	0.15	1.65	EKMM251VSN471MR30S	
	220	20 × 30	0.15	1.00	EKMM221VSN221MN30S		470	35 × 25	0.15	1.65	EKMM251VSN471MA25S	
	220	22 × 25	0.15	1.00	EKMM221VSN221MP25S		560	22 × 50	0.15	1.67	EKMM251VSN561MP50S	
	220	25.4 × 20	0.15	0.84	EKMM221VSN221MQ20S		560	25.4 × 40	0.15	1.80	EKMM251VSN561MQ40S	
	270	20 × 35	0.15	1.15	EKMM221VSN271MN35S		560	30 × 30	0.15	1.80	EKMM251VSN561MR30S	
	270	22 × 30	0.15	1.15	EKMM221VSN271MP30S		560	35 × 25	0.15	1.80	EKMM251VSN561MA25S	
	270	25.4 × 25	0.15	1.08	EKMM221VSN271MQ25S		680	25.4 × 50	0.15	2.00	EKMM251VSN681MQ50S	
	270	30 × 20	0.15	0.98	EKMM221VSN271MR20S		680	30 × 35	0.15	2.00	EKMM251VSN681MR35S	
	330	20 × 40	0.15	1.25	EKMM221VSN331MN40S		680	35 × 30	0.15	2.00	EKMM251VSN681MA30S	
	330	22 × 35	0.15	1.25	EKMM221VSN331MP35S		820	25.4 × 60	0.15	2.20	EKMM251VSN821MQ60S	
	330	25.4 × 25	0.15	1.25	EKMM221VSN331MQ25S		820	30 × 40	0.15	2.30	EKMM251VSN821MR40S	
	330	35 × 20	0.15	1.13	EKMM221VSN331MA20S		820	35 × 35	0.15	2.30	EKMM251VSN821MA35S	
	390	20 × 45	0.15	1.40	EKMM221VSN391MN45S		1,000	30 × 50	0.15	2.47	EKMM251VSN102MR50S	
	390	22 × 35	0.15	1.40	EKMM221VSN391MP35S		1,000	35 × 40	0.15	2.47	EKMM251VSN102MA40S	
	390	25.4 × 30	0.15	1.40	EKMM221VSN391MQ30S		1,200	30 × 60	0.15	2.85	EKMM251VSN122MR60S	
	390	30 × 25	0.15	1.36	EKMM221VSN391MR25S		1,200	35 × 45	0.15	2.60	EKMM251VSN122MA45S	
	390	35 × 20	0.15	1.23	EKMM221VSN391MA20S		1,500	35 × 50	0.15	3.00	EKMM251VSN152MA50S	
	470	20 × 50	0.15	1.51	EKMM221VSN471MN50S		1,800	35 × 60	0.15	3.42	EKMM251VSN182MA60S	
	470	22 × 40	0.15	1.51	EKMM221VSN471MP40S		315	56	20 × 20	0.15	0.38	EKMM3B1VSN560MN20S
	470	25.4 × 35	0.15	1.54	EKMM221VSN471MQ35S			68	20 × 25	0.15	0.47	EKMM3B1VSN680MN25S
	470	30 × 25	0.15	1.50	EKMM221VSN471MR25S			68	22 × 20	0.15	0.45	EKMM3B1VSN680MP20S
	560	22 × 45	0.15	1.70	EKMM221VSN561MP45S			82	20 × 25	0.15	0.64	EKMM3B1VSN820MN25S
	560	25.4 × 40	0.15	1.72	EKMM221VSN561MQ40S			82	22 × 20	0.15	0.47	EKMM3B1VSN820MP20S
	560	30 × 30	0.15	1.70	EKMM221VSN561MR30S			100	20 × 30	0.15	0.69	EKMM3B1VSN101MN30S
	560	35 × 25	0.15	1.71	EKMM221VSN561MA25S			100	22 × 25	0.15	0.61	EKMM3B1VSN101MP25S
	680	25.4 × 45	0.15	1.94	EKMM221VSN681MQ45S			100	25.4 × 20	0.15	0.56	EKMM3B1VSN101MQ20S
	680	30 × 35	0.15	1.93	EKMM221VSN681MR35S			120	20 × 30	0.15	0.75	EKMM3B1VSN121MN30S
	680	35 × 25	0.15	1.89	EKMM221VSN681MA25S			120	22 × 25	0.15	0.75	EKMM3B1VSN121MP25S
	820	25.4 × 50	0.15	2.18	EKMM221VSN821MQ50S			120	25.4 × 20	0.15	0.62	EKMM3B1VSN121MQ20S
	820	30 × 40	0.15	2.19	EKMM221VSN821MR40S			120	30 × 20	0.15	0.65	EKMM3B1VSN121MR20S
	820	35 × 30	0.15	2.16	EKMM221VSN821MA30S			150	20 × 35	0.15	0.82	EKMM3B1VSN151MN35S
	1,000	25.4 × 60	0.15	2.54	EKMM221VSN102MQ60S			150	22 × 30	0.15	0.82	EKMM3B1VSN151MP30S
	1,000	30 × 45	0.15	2.50	EKMM221VSN102MR45S			150	25.4 × 25	0.15	0.82	EKMM3B1VSN151MQ25S
	1,000	35 × 35	0.15	2.44	EKMM221VSN102MA35S			150	30 × 20	0.15	0.70	EKMM3B1VSN151MR20S
	1,200	30 × 50	0.15	2.81	EKMM221VSN122MR50S			150	35 × 20	0.15	0.76	EKMM3B1VSN151MA20S
	1,200	35 × 40	0.15	2.79	EKMM221VSN122MA40S			180	20 × 40	0.15	0.90	EKMM3B1VSN181MN40S
	1,500	30 × 60	0.15	3.30	EKMM221VSN152MR60S			180	22 × 35	0.15	0.92	EKMM3B1VSN181MP35S
	1,500	35 × 45	0.15	3.22	EKMM221VSN152MA45S			180	25.4 × 25	0.15	0.92	EKMM3B1VSN181MQ25S
	1,800	35 × 50	0.15	3.63	EKMM221VSN182MA50S			180	30 × 25	0.15	0.90	EKMM3B1VSN181MR25S
	2,200	35 × 60	0.15	4.23	EKMM221VSN222MA60S			180	35 × 20	0.15	0.85	EKMM3B1VSN181MA20S
250	100	20 × 20	0.15	0.51	EKMM251VSN101MN20S	220		20 × 50	0.15	1.00	EKMM3B1VSN221MN50S	
	120	20 × 25	0.15	0.58	EKMM251VSN121MN25S	220		22 × 40	0.15	1.04	EKMM3B1VSN221MP40S	
	120	22 × 20	0.15	0.60	EKMM251VSN121MP20S	220		25.4 × 30	0.15	1.04	EKMM3B1VSN221MQ30S	
	150	20 × 25	0.15	0.79	EKMM251VSN151MN25S	220		30 × 25	0.15	1.04	EKMM3B1VSN221MR25S	
	150	25.4 × 20	0.15	0.74	EKMM251VSN151MQ20S	220		35 × 20	0.15	0.90	EKMM3B1VSN221MA20S	
	180	20 × 30	0.15	0.90	EKMM251VSN181MN30S	270		22 × 45	0.15	1.16	EKMM3B1VSN271MP45S	
	180	22 × 25	0.15	0.78	EKMM251VSN181MP25S	270		25.4 × 35	0.15	1.16	EKMM3B1VSN271MQ35S	
	180	25.4 × 20	0.15	0.75	EKMM251VSN181MQ20S	270		30 × 25	0.15	1.16	EKMM3B1VSN271MR25S	
	220	20 × 30	0.15	1.00	EKMM251VSN221MN30S	270		35 × 25	0.15	1.15	EKMM3B1VSN271MA25S	
	220	22 × 25	0.15	1.00	EKMM251VSN221MP25S	330		22 × 50	0.15	1.33	EKMM3B1VSN331MP50S	
	220	25.4 × 25	0.15	0.95	EKMM251VSN221MQ25S	330		25.4 × 40	0.15	1.33	EKMM3B1VSN331MQ40S	
	220	30 × 20	0.15	0.95	EKMM251VSN221MR20S	330		30 × 30	0.15	1.33	EKMM3B1VSN331MR30S	
	270	20 × 35	0.15	1.10	EKMM251VSN271MN35S	330		35 × 25	0.15	1.33	EKMM3B1VSN331MA25S	
	270	22 × 30	0.15	1.18	EKMM251VSN271MP30S	390		25.4 × 45	0.15	1.47	EKMM3B1VSN391MQ45S	
	270	25.4 × 25	0.15	1.18	EKMM251VSN271MQ25S	390	30 × 35	0.15	1.47	EKMM3B1VSN391MR35S		
	270	30 × 20	0.15	1.00	EKMM251VSN271MR20S	390	35 × 30	0.15	1.47	EKMM3B1VSN391MA30S		
	330	20 × 40	0.15	1.20	EKMM251VSN331MN40S	470	25.4 × 50	0.15	1.70	EKMM3B1VSN471MQ50S		
	330	22 × 35	0.15	1.30	EKMM251VSN331MP35S	470	30 × 40	0.15	1.70	EKMM3B1VSN471MR40S		
	330	25.4 × 30	0.15	1.30	EKMM251VSN331MQ30S	470	35 × 30	0.15	1.70	EKMM3B1VSN471MA30S		

### ◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tanδ	Rated ripple current (Arms/105°C,120Hz)	Part No.	WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tanδ	Rated ripple current (Arms/105°C,120Hz)	Part No.
315	560	30×45	0.15	2.05	EKMM3B1VSN561MR45S	400	100	30×20	0.15	0.60	EKMM401VSN101MR20S
	560	35×35	0.15	2.05	EKMM3B1VSN561MA35S		120	20×40	0.15	0.75	EKMM401VSN121MN40S
	680	30×50	0.15	2.17	EKMM3B1VSN681MR50S		120	22×35	0.15	0.75	EKMM401VSN121MP35S
	680	35×40	0.15	2.17	EKMM3B1VSN681MA40S		120	25.4×25	0.15	0.75	EKMM401VSN121MQ25S
	820	35×45	0.15	2.20	EKMM3B1VSN821MA45S		120	30×25	0.15	0.73	EKMM401VSN121MR25S
	1,000	35×60	0.15	2.55	EKMM3B1VSN102MA60S		120	35×20	0.15	0.75	EKMM401VSN121MA20S
350	47	20×20	0.15	0.35	EKMM351VSN470MN20S	150	20×45	0.15	0.83	EKMM401VSN151MN45S	
	56	20×25	0.15	0.43	EKMM351VSN560MN25S	150	22×40	0.15	0.88	EKMM401VSN151MP40S	
	56	22×20	0.15	0.41	EKMM351VSN560MP20S	150	25.4×30	0.15	0.88	EKMM401VSN151MQ30S	
	68	20×25	0.15	0.47	EKMM351VSN680MN25S	150	30×25	0.15	0.88	EKMM401VSN151MR25S	
	68	25.4×20	0.15	0.46	EKMM351VSN680MQ20S	150	35×20	0.15	0.80	EKMM401VSN151MA20S	
	82	20×30	0.15	0.54	EKMM351VSN820MN30S	180	22×45	0.15	0.98	EKMM401VSN181MP45S	
	82	22×25	0.15	0.55	EKMM351VSN820MP25S	180	25.4×35	0.15	0.98	EKMM401VSN181MQ35S	
	82	25.4×20	0.15	0.51	EKMM351VSN820MQ20S	180	30×30	0.15	0.98	EKMM401VSN181MR30S	
	100	20×30	0.15	0.60	EKMM351VSN101MN30S	180	35×25	0.15	0.98	EKMM401VSN181MA25S	
	100	22×25	0.15	0.69	EKMM351VSN101MP25S	220	22×50	0.15	1.10	EKMM401VSN221MP50S	
	100	30×20	0.15	0.60	EKMM351VSN101MR20S	220	25.4×40	0.15	1.10	EKMM401VSN221MQ40S	
	120	20×35	0.15	0.68	EKMM351VSN121MN35S	220	30×30	0.15	1.10	EKMM401VSN221MR30S	
	120	22×30	0.15	0.75	EKMM351VSN121MP30S	220	35×25	0.15	1.10	EKMM401VSN221MA25S	
	120	25.4×25	0.15	0.75	EKMM351VSN121MQ25S	270	25.4×45	0.15	1.22	EKMM401VSN271MQ45S	
	120	30×20	0.15	0.65	EKMM351VSN121MR20S	270	30×35	0.15	1.22	EKMM401VSN271MR35S	
	150	20×40	0.15	0.78	EKMM351VSN151MN40S	270	35×30	0.15	1.22	EKMM401VSN271MA30S	
	150	22×35	0.15	0.82	EKMM351VSN151MP35S	330	25.4×50	0.15	1.44	EKMM401VSN331MQ50S	
	150	25.4×30	0.15	0.83	EKMM351VSN151MQ30S	330	30×40	0.15	1.44	EKMM401VSN331MR40S	
	150	30×25	0.15	0.82	EKMM351VSN151MR25S	330	35×30	0.15	1.44	EKMM401VSN331MA30S	
	150	35×20	0.15	0.76	EKMM351VSN151MA20S	390	25.4×60	0.15	1.51	EKMM401VSN391MQ60S	
	180	20×45	0.15	0.87	EKMM351VSN181MN45S	390	30×45	0.15	1.60	EKMM401VSN391MR45S	
	180	22×40	0.15	0.92	EKMM351VSN181MP40S	390	35×35	0.15	1.60	EKMM401VSN391MA35S	
	180	25.4×30	0.15	0.92	EKMM351VSN181MQ30S	470	30×50	0.15	1.90	EKMM401VSN471MR50S	
	180	30×25	0.15	0.90	EKMM351VSN181MR25S	470	35×40	0.15	1.90	EKMM401VSN471MA40S	
	220	20×50	0.15	1.00	EKMM351VSN221MN50S	560	30×60	0.15	2.10	EKMM401VSN561MR60S	
	220	22×45	0.15	1.05	EKMM351VSN221MP45S	560	35×45	0.15	2.12	EKMM401VSN561MA45S	
	220	25.4×35	0.15	1.04	EKMM351VSN221MQ35S	680	35×60	0.15	2.27	EKMM401VSN681MA60S	
	220	30×30	0.15	1.02	EKMM351VSN221MR30S	420	39	20×20	0.20	0.32	EKMM421VSN390MN20S
	220	35×25	0.15	1.04	EKMM351VSN221MA25S		47	20×25	0.20	0.39	EKMM421VSN470MN25S
	270	22×50	0.15	1.16	EKMM351VSN271MP50S		47	22×20	0.20	0.37	EKMM421VSN470MP20S
	270	25.4×40	0.15	1.18	EKMM351VSN271MQ40S		56	20×25	0.20	0.51	EKMM421VSN560MN25S
	270	30×30	0.15	1.17	EKMM351VSN271MR30S		56	25.4×20	0.20	0.42	EKMM421VSN560MQ20S
	270	35×25	0.15	1.20	EKMM351VSN271MA25S		68	20×30	0.20	0.56	EKMM421VSN680MN30S
	330	25.4×45	0.15	1.29	EKMM351VSN331MQ45S		68	22×25	0.20	0.50	EKMM421VSN680MP25S
	330	30×35	0.15	1.34	EKMM351VSN331MR35S		68	25.4×20	0.20	0.46	EKMM421VSN680MQ20S
	330	35×30	0.15	1.22	EKMM351VSN331MA30S		82	20×35	0.20	0.64	EKMM421VSN820MN35S
390	25.4×50	0.15	1.51	EKMM351VSN391MQ50S	82		22×25	0.20	0.64	EKMM421VSN820MP25S	
390	30×40	0.15	1.51	EKMM351VSN391MR40S	82		25.4×25	0.20	0.58	EKMM421VSN820MQ25S	
390	35×35	0.15	1.47	EKMM351VSN391MA35S	82		30×20	0.20	0.53	EKMM421VSN820MR20S	
470	25.4×60	0.15	1.66	EKMM351VSN471MQ60S	100		20×35	0.20	0.70	EKMM421VSN101MN35S	
470	30×45	0.15	1.65	EKMM351VSN471MR45S	100		22×30	0.20	0.70	EKMM421VSN101MP30S	
470	35×35	0.15	1.69	EKMM351VSN471MA35S	100		25.4×25	0.20	0.70	EKMM421VSN101MQ25S	
560	30×50	0.15	1.85	EKMM351VSN561MR50S	100		30×20	0.20	0.59	EKMM421VSN101MR20S	
560	35×40	0.15	1.90	EKMM351VSN561MA40S	120		20×40	0.20	0.75	EKMM421VSN121MN40S	
680	30×60	0.15	2.15	EKMM351VSN681MR60S	120		22×35	0.20	0.75	EKMM421VSN121MP35S	
680	35×50	0.15	1.99	EKMM351VSN681MA50S	120		25.4×30	0.20	0.75	EKMM421VSN121MQ30S	
820	35×60	0.15	2.31	EKMM351VSN821MA60S	120		30×25	0.20	0.73	EKMM421VSN121MR25S	
400	39	20×20	0.15	0.32	EKMM401VSN390MN20S		120	35×20	0.20	0.67	EKMM421VSN121MA20S
	47	20×25	0.15	0.39	EKMM401VSN470MN25S		150	20×50	0.20	0.88	EKMM421VSN151MN50S
	47	22×20	0.15	0.37	EKMM401VSN470MP20S		150	22×40	0.20	0.88	EKMM421VSN151MP40S
	56	20×25	0.15	0.51	EKMM401VSN560MN25S		150	25.4×35	0.20	0.88	EKMM421VSN151MQ35S
	56	25.4×20	0.15	0.42	EKMM401VSN560MQ20S		150	30×25	0.20	0.88	EKMM421VSN151MR25S
	68	20×30	0.15	0.56	EKMM401VSN680MN30S		180	22×45	0.20	0.95	EKMM421VSN181MP45S
	68	22×25	0.15	0.50	EKMM401VSN680MP25S		180	25.4×35	0.20	0.95	EKMM421VSN181MQ35S
	68	25.4×20	0.15	0.46	EKMM401VSN680MQ20S		180	30×30	0.20	0.95	EKMM421VSN181MR30S
	82	20×30	0.15	0.64	EKMM401VSN820MN30S		180	35×25	0.20	0.94	EKMM421VSN181MA25S
	82	22×25	0.15	0.64	EKMM401VSN820MP25S		220	22×50	0.20	1.10	EKMM421VSN221MP50S
	82	30×20	0.15	0.55	EKMM401VSN820MR20S		220	25.4×45	0.20	1.10	EKMM421VSN221MQ45S
	100	20×35	0.15	0.70	EKMM401VSN101MN35S		220	30×35	0.20	1.10	EKMM421VSN221MR35S
	100	22×30	0.15	0.70	EKMM401VSN101MP30S		220	35×25	0.20	1.10	EKMM421VSN221MA25S
	100	25.4×25	0.15	0.70	EKMM401VSN101MQ25S		270	25.4×50	0.20	1.22	EKMM421VSN271MQ50S

### ◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tanδ	Rated ripple current (Arms/105°C,120Hz)	Part No.	WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tanδ	Rated ripple current (Arms/105°C,120Hz)	Part No.
420	270	30×40	0.20	1.22	EKMM421VSN271MR40S	450	120	20×50	0.20	0.75	EKMM451VSN121MN50S
	270	35×30	0.20	1.22	EKMM421VSN271MA30S		120	22×40	0.20	0.80	EKMM451VSN121MP40S
	330	25.4×60	0.20	1.41	EKMM421VSN331MQ60S		120	25.4×30	0.20	0.80	EKMM451VSN121MQ30S
	330	30×45	0.20	1.45	EKMM421VSN331MR45S		120	30×25	0.20	0.80	EKMM451VSN121MR25S
	330	35×35	0.20	1.45	EKMM421VSN331MA35S		120	35×25	0.20	0.73	EKMM451VSN121MA25S
	390	30×50	0.20	1.55	EKMM421VSN391MR50S		150	22×45	0.20	0.88	EKMM451VSN151MP45S
	390	35×40	0.20	1.55	EKMM421VSN391MA40S		150	25.4×35	0.20	0.88	EKMM451VSN151MQ35S
	470	30×60	0.20	1.79	EKMM421VSN471MR60S		150	30×30	0.20	0.88	EKMM451VSN151MR30S
	470	35×45	0.20	1.90	EKMM421VSN471MA45S		150	35×25	0.20	0.75	EKMM451VSN151MA25S
	560	35×50	0.20	2.15	EKMM421VSN561MA50S		180	22×50	0.20	1.00	EKMM451VSN181MP50S
	680	35×60	0.20	2.27	EKMM421VSN681MA60S		180	25.4×40	0.20	1.00	EKMM451VSN181MQ40S
450	39	20×25	0.20	0.34	EKMM451VSN390MN25S		180	30×30	0.20	1.00	EKMM451VSN181MR30S
	47	20×25	0.20	0.39	EKMM451VSN470MN25S		220	25.4×45	0.20	1.12	EKMM451VSN221MQ45S
	56	20×30	0.20	0.51	EKMM451VSN560MN30S		220	30×35	0.20	1.12	EKMM451VSN221MR35S
	56	22×25	0.20	0.40	EKMM451VSN560MP25S		220	35×30	0.20	1.12	EKMM451VSN221MA30S
	68	20×35	0.20	0.56	EKMM451VSN680MN35S		270	25.4×60	0.20	1.18	EKMM451VSN271MQ60S
	68	22×30	0.20	0.53	EKMM451VSN680MP30S		270	30×40	0.20	1.28	EKMM451VSN271MR40S
	68	25.4×25	0.20	0.50	EKMM451VSN680MQ25S		270	35×35	0.20	1.28	EKMM451VSN271MA35S
	82	20×35	0.20	0.64	EKMM451VSN820MN35S		330	30×50	0.20	1.45	EKMM451VSN331MR50S
	82	22×30	0.20	0.64	EKMM451VSN820MP30S		330	35×40	0.20	1.45	EKMM451VSN331MA40S
	82	25.4×25	0.20	0.64	EKMM451VSN820MQ25S		390	30×60	0.20	1.51	EKMM451VSN391MR60S
	100	20×45	0.20	0.69	EKMM451VSN101MN45S	390	35×40	0.20	1.55	EKMM451VSN391MA40S	
	100	22×35	0.20	0.69	EKMM451VSN101MP35S	470	35×50	0.20	1.85	EKMM451VSN471MA50S	
	100	25.4×30	0.20	0.69	EKMM451VSN101MQ30S	560	35×60	0.20	1.91	EKMM451VSN561MA60S	
	100	30×25	0.20	0.64	EKMM451VSN101MR25S						

### ◆RATED RIPPLE CURRENT MULTIPLIERS

#### ●Frequency Multipliers

Frequency (Hz)	50	120	300	1k	10k	50k
160 to 250Vdc	0.81	1.00	1.17	1.32	1.45	1.50
315 to 450Vdc	0.77	1.00	1.16	1.30	1.41	1.43

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