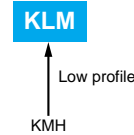


# KLM Series

- 15mm height snap-ins
- Endurance with ripple current : 2,000 hours at 105°C
- Non solvent resistant type
- RoHS Compliant

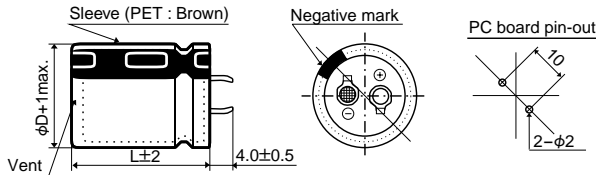


## ◆ SPECIFICATIONS

Items	Characteristics	
Category	-25 to +105°C	
Temperature Range		
Rated Voltage Range	160 to 400V <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
	tanδ (Max.)	0.20 (at 20°C, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	160 to 400V
	Z (-25°C) / Z (+20°C)	4 (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 2,000 hours 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

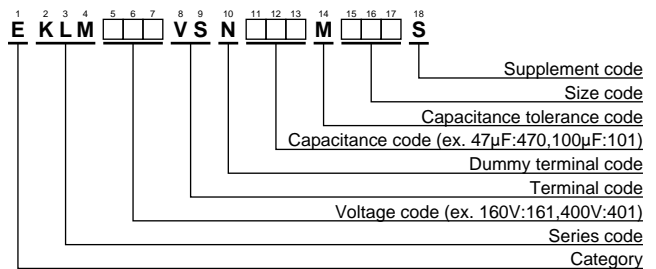
## ◆ DIMENSIONS [mm]

- Terminal Code : VS



The standard design has no plastic disc.

## ◆ PART NUMBERING SYSTEM



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

## ◆ STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (µF)	Case size φD×L(mm)	tanδ	Rated ripple current (Arms/105°C,120Hz)	Part No.	
160	150	22 × 15	0.20	0.68	EKLM161VSN151MP15S	
	180	25.4 × 15	0.20	0.79	EKLM161VSN181MQ15S	
	220	25.4 × 15	0.20	0.88	EKLM161VSN221MQ15S	
	270	30 × 15	0.20	0.96	EKLM161VSN271MR15S	
	330	30 × 15	0.20	1.06	EKLM161VSN331MR15S	
180	390	35 × 15	0.20	1.20	EKLM161VSN391MA15S	
	120	22 × 15	0.20	0.61	EKLM181VSN121MP15S	
	150	25.4 × 15	0.20	0.73	EKLM181VSN151MQ15S	
	180	25.4 × 15	0.20	0.79	EKLM181VSN181MQ15S	
	220	30 × 15	0.20	0.86	EKLM181VSN221MR15S	
200	270	30 × 15	0.20	0.96	EKLM181VSN271MR15S	
	330	35 × 15	0.20	1.10	EKLM181VSN331MA15S	
	390	35 × 15	0.20	1.17	EKLM181VSN391MA15S	
	120	22 × 15	0.20	0.61	EKLM201VSN121MP15S	
	150	25.4 × 15	0.20	0.73	EKLM201VSN151MQ15S	
200	180	30 × 15	0.20	0.79	EKLM201VSN181MR15S	
	220	30 × 15	0.20	0.86	EKLM201VSN221MR15S	
	270	30 × 15	0.20	0.96	EKLM201VSN271MR15S	
	330	35 × 15	0.20	1.10	EKLM201VSN331MA15S	
	390	35 × 15	0.20	1.17	EKLM201VSN391MA15S	
	250	82	22 × 15	0.20	0.50	EKLM251VSN820MP15S
		100	25.4 × 15	0.20	0.59	EKLM251VSN101MQ15S
		120	25.4 × 15	0.20	0.65	EKLM251VSN121MQ15S
		150	30 × 15	0.20	0.71	EKLM251VSN151MR15S
		180	30 × 15	0.20	0.79	EKLM251VSN181MR15S
	400	220	35 × 15	0.20	0.90	EKLM251VSN221MA15S
		39	22 × 15	0.20	0.35	EKLM401VSN390MP15S
47		25.4 × 15	0.20	0.40	EKLM401VSN470MQ15S	
56		25.4 × 15	0.20	0.44	EKLM401VSN560MQ15S	
68		30 × 15	0.20	0.46	EKLM401VSN680MR15S	
82		30 × 15	0.20	0.51	EKLM401VSN820MR15S	
100		35 × 15	0.20	0.56	EKLM401VSN101MA15S	
120	35 × 15	0.20	0.62	EKLM401VSN121MA15S		

## ◆ RATED RIPPLE CURRENT MULTIPLIERS

- Frequency Multipliers

Frequency (Hz)	50	120	300	1k	10k	50k
160 to 250V <sub>dc</sub>	0.81	1.00	1.17	1.32	1.45	1.50
400V <sub>dc</sub>	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.