

# KMH Series

- Radial lead type ranging from φ20×20 to φ22×50mm
- For power supply input filtering
- Endurance with ripple current : 2,000 hours at 105°C
- Non solvent resistant type
- RoHS Compliant

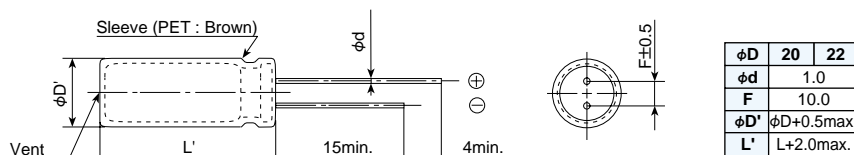


## ◆SPECIFICATIONS

Items	Characteristics		
Category	-25 to +105°C		
Temperature Range			
Rated Voltage Range	160 to 450V <sub>dc</sub>		
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)		
Leakage Current	I=0.03CV or 3 mA, whichever is smaller. Where, I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (V) (at 20°C after 5 minutes)		
Dissipation Factor (tanδ)	0.15max. (at 20°C, 120Hz)		
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	160 to 250V	400 & 450V
	Z(-25°C)/Z(+20°C)	4	6
	(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	≤±20% of the initial value	
	D.F. (tanδ)	≤200% of the initial specified value	
	Leakage current	≤500% of the initial specified value	

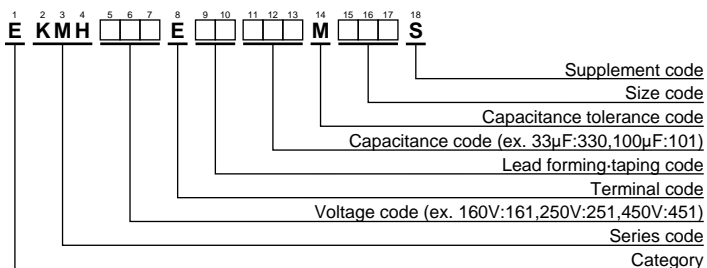
## ◆DIMENSIONS [mm]

- Terminal Code : E



\*Note : The snap-in forming type "RC" is available upon request, the RC type fits two φ2mm holes with 10.5mm spacing.

## ◆PART NUMBERING SYSTEM



Specifications in this bulletin are subject to change without notice.

◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tanδ	Rated ripple current (mA rms/105°C, 120Hz)	Part No.	WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tanδ	Rated ripple current (mA rms/105°C, 120Hz)	Part No.	
160	150	20×20	0.15	580	EKMH161E□□151MN20S	250	220	22×30	0.15	950	EKMH251E□□221MP30S	
	180	20×25	0.15	690	EKMH161E□□181MN25S		270	20×40	0.15	1,090	EKMH251E□□271MN40S	
	180	22×20	0.15	680	EKMH161E□□181MP20S		270	22×35	0.15	1,140	EKMH251E□□271MP35S	
	220	20×25	0.15	760	EKMH161E□□221MN25S		330	20×45	0.15	1,260	EKMH251E□□331MN45S	
	220	22×25	0.15	820	EKMH161E□□221MP25S		330	22×40	0.15	1,300	EKMH251E□□331MP40S	
	270	20×30	0.15	910	EKMH161E□□271MN30S		390	20×50	0.15	1,410	EKMH251E□□391MN50S	
	270	22×25	0.15	910	EKMH161E□□271MP25S		390	22×45	0.15	1,490	EKMH251E□□391MP45S	
	330	20×30	0.15	1,010	EKMH161E□□331MN30S		470	22×50	0.15	1,650	EKMH251E□□471MP50S	
	330	22×30	0.15	1,160	EKMH161E□□331MP30S		400	33	20×20	0.15	290	EKMH401E□□330MN20S
	390	20×35	0.15	1,150	EKMH161E□□391MN35S			47	22×20	0.15	370	EKMH401E□□470MP20S
	390	22×30	0.15	1,270	EKMH161E□□391MP30S			56	20×25	0.15	410	EKMH401E□□560MN25S
	470	20×40	0.15	1,340	EKMH161E□□471MN40S			68	20×30	0.15	490	EKMH401E□□680MN30S
470	22×35	0.15	1,400	EKMH161E□□471MP35S	68	22×25		0.15	510	EKMH401E□□680MP25S		
200	120	20×20	0.15	520	EKMH201E□□121MN20S	100		20×35	0.15	620	EKMH401E□□101MN35S	
	150	20×25	0.15	630	EKMH201E□□151MN25S	100		22×30	0.15	640	EKMH401E□□101MP30S	
	150	22×20	0.15	620	EKMH201E□□151MP20S	120		20×40	0.15	720	EKMH401E□□121MN40S	
	180	20×25	0.15	690	EKMH201E□□181MN25S	120		22×35	0.15	730	EKMH401E□□121MP35S	
	180	22×25	0.15	750	EKMH201E□□181MP25S	150		20×45	0.15	850	EKMH401E□□151MN45S	
	220	20×30	0.15	820	EKMH201E□□221MN30S	150		22×40	0.15	880	EKMH401E□□151MP40S	
	220	22×25	0.15	820	EKMH201E□□221MP25S	180		20×50	0.15	960	EKMH401E□□181MN50S	
	270	20×30	0.15	910	EKMH201E□□271MN30S	180	22×45	0.15	990	EKMH401E□□181MP45S		
	270	22×30	0.15	980	EKMH201E□□271MP30S	220	22×50	0.15	1,130	EKMH401E□□221MP50S		
	330	20×35	0.15	1,050	EKMH201E□□331MN35S	450	33	20×25	0.15	310	EKMH451E□□330MN25S	
	330	22×35	0.15	1,200	EKMH201E□□331MP35S		47	22×25	0.15	420	EKMH451E□□470MP25S	
	390	20×40	0.15	1,220	EKMH201E□□391MN40S		56	20×30	0.15	440	EKMH451E□□560MN30S	
390	22×35	0.15	1,310	EKMH201E□□391MP35S	68		20×35	0.15	510	EKMH451E□□680MN35S		
470	20×45	0.15	1,340	EKMH201E□□471MN45S	68		22×30	0.15	520	EKMH451E□□680MP30S		
470	22×40	0.15	1,450	EKMH201E□□471MP40S	82		20×40	0.15	600	EKMH451E□□820MN40S		
250	82	20×20	0.15	460	EKMH251E□□820MN20S		82	22×35	0.15	600	EKMH451E□□820MP35S	
	120	20×25	0.15	600	EKMH251E□□121MN25S		100	20×45	0.15	690	EKMH451E□□101MN45S	
	120	22×20	0.15	590	EKMH251E□□121MP20S		100	22×40	0.15	710	EKMH451E□□101MP40S	
	180	20×30	0.15	790	EKMH251E□□181MN30S		120	20×50	0.15	780	EKMH451E□□121MN50S	
	180	22×25	0.15	790	EKMH251E□□181MP25S		120	22×45	0.15	810	EKMH451E□□121MP45S	
	220	20×35	0.15	920	EKMH251E□□221MN35S		150	22×50	0.15	930	EKMH451E□□151MP50S	

□□ : Enter the appropriate lead forming or taping code.

◆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
400 & 450V <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.