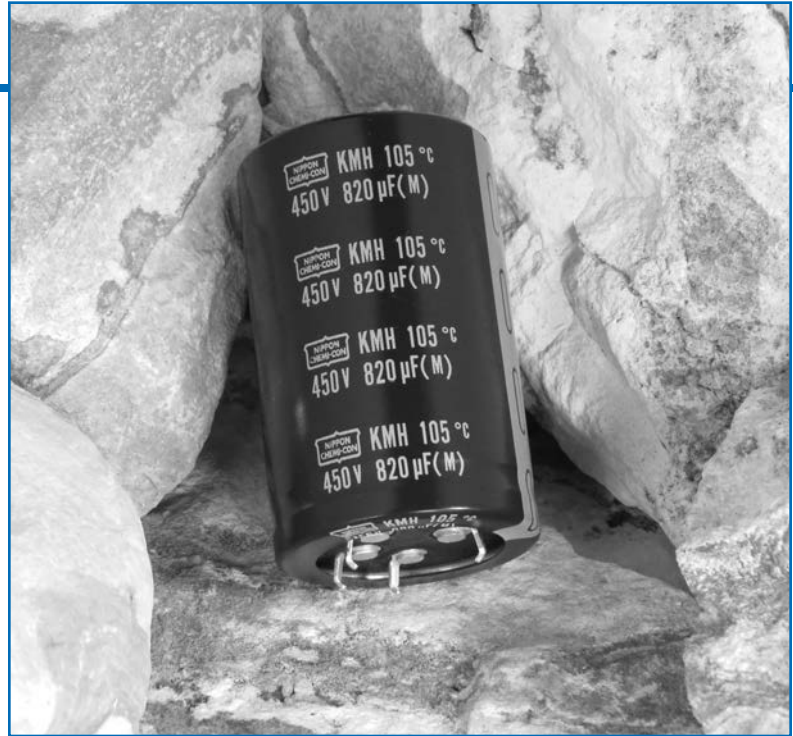


- Snap Mount
- Large Capacitance
- High CV
- High Ripple
- RoHS Compliant
- +105°C Maximum Temperature



The KMH series capacitors are the standard +105°C high temperature, large capacitance snap-in capacitors that offer a wide voltage range of 6.3 to 450VDC. The endurance for the KMH series is 2,000 hours at +105°C with the rated ripple current applied. With very high CV values and high ripple current capabilities these capacitors are ideal for use in power supply filter circuits.

All KMH series capacitors are RoHS compliant and available in a variety of sizes, with or without an end disk, and encased in a standard Pb-free PVC sleeve or an optional PET sleeve. The KMH capacitors are available with snap-in terminals (2 or 4-pin) depending on can diameter. Straight standoff terminals (5 pin) are optional for the 40mm can diameter.

## Summary of Specifications

- PC board 2 or 4-pin snap-in; optional 5-pin (Ø40 only) straight standoff terminals.
- Capacitance range: 47 to 220,000µF.
- Voltage range: 6.3 to 450VDC.
- Category temperature range: -40°C to +105°C for 6.3 to 100V; -25°C to +105°C for 160 to 450V.
- Leakage current: 0.02CV(µA) or 3mA, whichever is smaller, after 5 minutes at +20°C.
- Standard capacitance tolerance: ±20%
- Nominal case size (D×L): 22×20mm to 40×80mm.
- Rated lifetime: 2,000 hours at +105°C with the rated ripple current applied.

# KMH Series

## KMH Specifications - Snap Mount

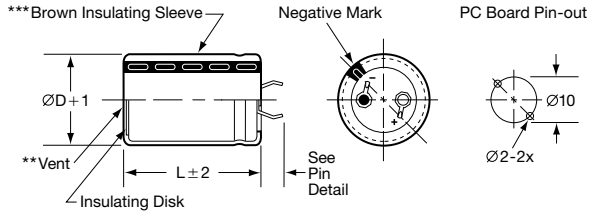
Item	Characteristics																																													
Category Temperature Range	- 40 to +105°C for 6.3 to 100VDC; - 25 to +105°C for 160 to 450VDC																																													
Rated Voltage Range	6.3 to 450VDC																																													
Capacitance Range	47 to 220,000 $\mu$ F																																													
Capacitance Tolerance	$\pm$ 20% (M) at +20°C, 120Hz																																													
Leakage Current	I = 0.02CV ( $\mu$ A) or 3mA, whichever is smaller, after 5 minutes at +20°C. Where I = Max. leakage current ( $\mu$ A), C = Nominal capacitance ( $\mu$ F) and V = Rated voltage (V)																																													
Dissipation Factor (Tan $\delta$ )	At +20°C, 120Hz <table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63-100</th> <th>160-250</th> <th>315-450</th> </tr> </thead> <tbody> <tr> <td>Tan <math>\delta</math> (DF) Max.†</td> <td>0.60</td> <td>0.50</td> <td>0.40</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.15</td> <td>0.10*</td> <td>0.15</td> </tr> </tbody> </table> <p>*0.15 maximum for 35mm and 40mm diameter or 20mm in length. † For rated voltages <math>\leq</math> 63V, values are not valid for case sizes &gt;35mm in diameter or &gt;50mm in length.</p>	Rated Voltage (V)	6.3	10	16	25	35	50	63-100	160-250	315-450	Tan $\delta$ (DF) Max.†	0.60	0.50	0.40	0.30	0.25	0.20	0.15	0.10*	0.15																									
Rated Voltage (V)	6.3	10	16	25	35	50	63-100	160-250	315-450																																					
Tan $\delta$ (DF) Max.†	0.60	0.50	0.40	0.30	0.25	0.20	0.15	0.10*	0.15																																					
Low Temperature Characteristics	At 120Hz, impedance (Z) ratio between the -25°C or -40°C value and +20°C value shall not exceed the values given below. <table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3-16</th> <th>25</th> <th>35</th> <th>50, 63</th> <th>80, 100</th> <th>160-400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>Z (-25°C) / Z (+20°C)</td> <td>4</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>4</td> <td>8</td> </tr> <tr> <td>Z (-40°C) / Z (+20°C)</td> <td>15</td> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>—</td> <td>—</td> </tr> </tbody> </table>	Rated Voltage (V)	6.3-16	25	35	50, 63	80, 100	160-400	450	Z (-25°C) / Z (+20°C)	4	3	3	2	2	4	8	Z (-40°C) / Z (+20°C)	15	10	8	6	5	—	—																					
Rated Voltage (V)	6.3-16	25	35	50, 63	80, 100	160-400	450																																							
Z (-25°C) / Z (+20°C)	4	3	3	2	2	4	8																																							
Z (-40°C) / Z (+20°C)	15	10	8	6	5	—	—																																							
Rated Ripple Current Multipliers	Ambient Temperature (°C) <table border="1"> <thead> <tr> <th>+45°C</th> <th>+60°C</th> <th>+70°C</th> <th>+85°C</th> <th>+105°C</th> </tr> </thead> <tbody> <tr> <td>2.64</td> <td>2.23</td> <td>2.12</td> <td>1.73</td> <td>1.00</td> </tr> </tbody> </table> Frequency (Hz) <table border="1"> <thead> <tr> <th>DC Rated Voltage</th> <th>50Hz</th> <th>120Hz</th> <th>300Hz</th> <th>1kHz</th> <th>10kHz</th> <th>100kHz</th> </tr> </thead> <tbody> <tr> <td>6.3-50V</td> <td>0.95</td> <td>1.00</td> <td>1.03</td> <td>1.05</td> <td>1.08</td> <td>1.08</td> </tr> <tr> <td>63-100V</td> <td>0.92</td> <td>1.00</td> <td>1.07</td> <td>1.13</td> <td>1.19</td> <td>1.20</td> </tr> <tr> <td>160-250V</td> <td>0.81</td> <td>1.00</td> <td>1.17</td> <td>1.32</td> <td>1.45</td> <td>1.50</td> </tr> <tr> <td>315-450V</td> <td>0.77</td> <td>1.00</td> <td>1.16</td> <td>1.30</td> <td>1.41</td> <td>1.43</td> </tr> </tbody> </table>	+45°C	+60°C	+70°C	+85°C	+105°C	2.64	2.23	2.12	1.73	1.00	DC Rated Voltage	50Hz	120Hz	300Hz	1kHz	10kHz	100kHz	6.3-50V	0.95	1.00	1.03	1.05	1.08	1.08	63-100V	0.92	1.00	1.07	1.13	1.19	1.20	160-250V	0.81	1.00	1.17	1.32	1.45	1.50	315-450V	0.77	1.00	1.16	1.30	1.41	1.43
+45°C	+60°C	+70°C	+85°C	+105°C																																										
2.64	2.23	2.12	1.73	1.00																																										
DC Rated Voltage	50Hz	120Hz	300Hz	1kHz	10kHz	100kHz																																								
6.3-50V	0.95	1.00	1.03	1.05	1.08	1.08																																								
63-100V	0.92	1.00	1.07	1.13	1.19	1.20																																								
160-250V	0.81	1.00	1.17	1.32	1.45	1.50																																								
315-450V	0.77	1.00	1.16	1.30	1.41	1.43																																								
Endurance (Load Life)	The following specifications shall be satisfied when the capacitors are restored to +20°C after subjecting them to DC voltage for 2,000 hours at +105°C with the rated ripple current applied. The sum of the DC voltage and peak AC voltage must not exceed the full rated voltage of the capacitors. Capacitance change: $\leq \pm$ 20% of initial measured value Tan $\delta$ (DF) : $\leq$ 200% of initial specified value Leakage current : $\leq$ 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. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements. Capacitance change: $\leq \pm$ 20% of initial measured value Tan $\delta$ (DF) : $\leq$ 150% of initial specified value Leakage current : $\leq$ initial specified value																																													

# KMH Series

## Diagram of Dimensions - Snap Mount

### Snap Mount

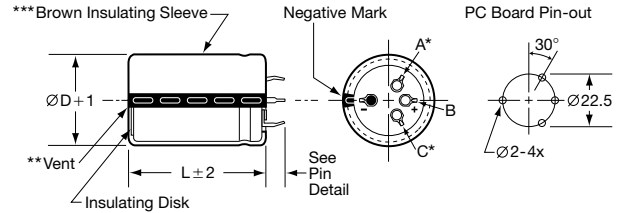
VSN Snap-in  $\varnothing 22$  and  $\varnothing 35$  standard  
VNN Snap-in  $\varnothing 22$  and  $\varnothing 35$  optional



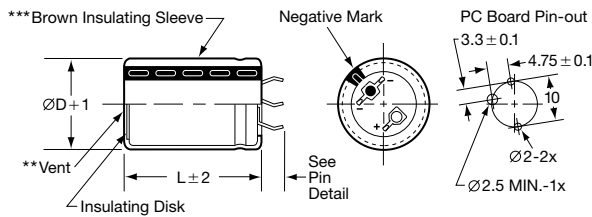
### Snap Mount

Unit: mm

VND Snap-in  $\varnothing 35$  and  $\varnothing 40$  standard  
VSD Snap-in  $\varnothing 35$  and  $\varnothing 40$  optional

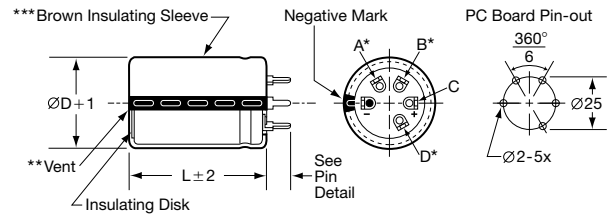


VEN Snap-in  $\varnothing 30$  and  $\varnothing 35$  optional

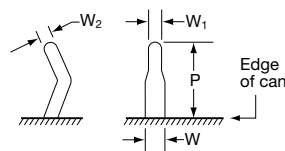


### Straight Pin Mount

VQT Straight Standoff  $\varnothing 40$  optional

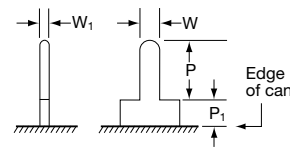


VS, VE & VN Snap-in Pin Dimensions



Type	P	W	W <sub>1</sub>	W <sub>2</sub>
VSN $\varnothing 22$ - $\varnothing 30$	4.0±0.5	1.5±0.2	0.8±0.1	0.8±0.1
VSN $\varnothing 35$	3.5±0.5			
VNN $\varnothing 22$ - $\varnothing 35$	5.8±1.0			
VEN $\varnothing 30$ - $\varnothing 35$	4.0±0.5			
VSD $\varnothing 35$ - $\varnothing 40$	3.5±1.0			
VND $\varnothing 35$ - $\varnothing 40$	5.8±1.0			

VQ Straight Standoff Pin Dimensions



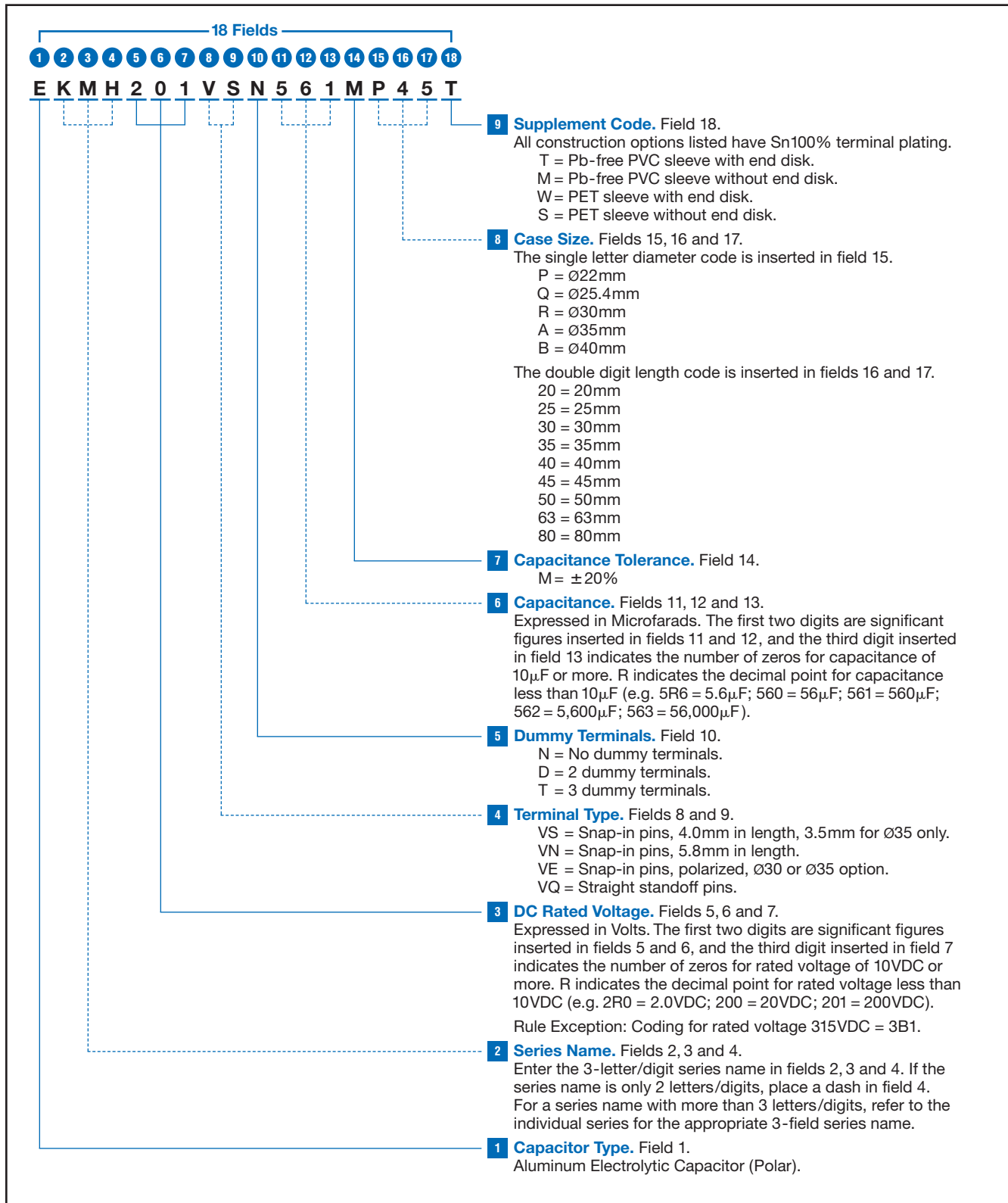
Type	P	P <sub>1</sub>	W	W <sub>1</sub>
Standoff Pin (VQ)	3.75±1.0	2.0 max.	1.5±0.1	0.7±0.2

### CAUTION:

- \* Use the blank terminals for mechanical support only. The blank terminals must not be connected to a solder trace on the PC board but be electrically isolated from the negative and positive terminals.
- \*\* The vent may be located either on the bottom or side of the can.
- \*\*\* The brown sleeve with gray stripe negative pin indicator is standard. Also note in some cases, the sleeve color may change slightly due to the operating conditions, however, the discoloration will not impair capacitor function.

# KMH Series

**Part Numbering System for KMH Series** When ordering, always specify complete 18-field global part number.



# KMH Series

## Standard Voltage Ratings - Snap Mount

Rated Voltage (WVDC)	Capacitance (µF)	Global Part Number†	Nominal Case Size* D × L (mm)	Case Size Code	Maximum ESR (Ω) at +20°C, 120Hz	Rated Ripple Current (A rms) at +105°C, 120Hz
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<b>6.3 Volts 8 Volts Surge</b>	12,000	EKMH6R3VSN123MP25T	22 × 25	P25	0.083	1.54
	15,000	EKMH6R3VSN153MP25T	22 × 25	P25	0.066	1.72
	18,000	EKMH6R3VSN183MP30T	22 × 30	P30	0.055	1.95
	22,000	EKMH6R3VSN223MP35T	22 × 35	P35	0.045	2.23
	27,000	EKMH6R3VSN273MP40T	22 × 40	P40	0.037	2.54
	33,000	EKMH6R3VSN333MP45T	22 × 45	P45	0.03	2.88
	18,000	EKMH6R3VSN183MQ25T	25.4 × 25	Q25	0.055	1.96
	22,000	EKMH6R3VSN223MQ30T	25.4 × 30	Q30	0.045	2.25
	27,000	EKMH6R3VSN273MQ35T	25.4 × 35	Q35	0.037	2.57
	33,000	EKMH6R3VSN333MQ40T	25.4 × 40	Q40	0.03	2.93
	39,000	EKMH6R3VSN393MQ40T	25.4 × 40	Q40	0.026	3.18
	47,000	EKMH6R3VSN473MQ50T	25.4 × 50	Q50	0.021	3.69
	22,000	EKMH6R3VSN223MR25T	30 × 25	R25	0.045	2.28
	27,000	EKMH6R3VSN273MR25T	30 × 25	R25	0.037	2.52
	33,000	EKMH6R3VSN333MR30T	30 × 30	R30	0.03	2.89
	39,000	EKMH6R3VSN393MR35T	30 × 35	R35	0.026	3.26
	47,000	EKMH6R3VSN473MR40T	30 × 40	R40	0.021	3.69
	56,000	EKMH6R3VSN563MR45T	30 × 45	R45	0.018	4.16
	68,000	EKMH6R3VSN683MR50T	30 × 50	R50	0.015	4.71
	33,000	EKMH6R3VSN333MA25T	35 × 25	A25	0.03	2.93
	39,000	EKMH6R3VSN393MA30T	35 × 30	A30	0.026	3.4
	47,000	EKMH6R3VSN473MA30T	35 × 30	A30	0.021	3.73
	56,000	EKMH6R3VSN563MA35T	35 × 35	A35	0.018	4.12
	68,000	EKMH6R3VSN683MA40T	35 × 40	A40	0.015	4.69
	82,000	EKMH6R3VSN823MA45T	35 × 45	A45	0.012	5.32
	120,000	EKMH6R3VND124MA63T	35 × 63	A63	0.011	6.9
	180,000	EKMH6R3VND184MA80T	35 × 80	A80	0.008	9.04
	56,000	EKMH6R3VND563MB25T	40 × 25	B25	0.026	3.87
	68,000	EKMH6R3VND683MB30T	40 × 30	B30	0.02	4.47
	82,000	EKMH6R3VND823MB35T	40 × 35	B35	0.018	5.09
	100,000	EKMH6R3VND104MB40T	40 × 40	B40	0.014	5.79
	150,000	EKMH6R3VND154MB50T	40 × 50	B50	0.011	7.54
180,000	EKMH6R3VND184MB63T	40 × 63	B63	0.009	8.82	
220,000	EKMH6R3VND224MB80T	40 × 80	B80	0.008	10.61	

<b>10 Volts 13 Volts Surge</b>	10,000	EKMH100VSN103MP25T	22 × 25	P25	0.083	1.55
	12,000	EKMH100VSN123MP30T	22 × 30	P30	0.069	1.77
	15,000	EKMH100VSN153MP30T	22 × 30	P30	0.055	1.97
	18,000	EKMH100VSN183MP35T	22 × 35	P35	0.046	2.21
	22,000	EKMH100VSN223MP40T	22 × 40	P40	0.038	2.51
	27,000	EKMH100VSN273MP50T	22 × 50	P50	0.031	2.93
	15,000	EKMH100VSN153MQ25T	25.4 × 25	Q25	0.055	1.96
	18,000	EKMH100VSN183MQ30T	25.4 × 30	Q30	0.046	2.23
	22,000	EKMH100VSN223MQ35T	25.4 × 35	Q35	0.038	2.54
	27,000	EKMH100VSN273MQ40T	25.4 × 40	Q40	0.031	2.9
	33,000	EKMH100VSN333MQ45T	25.4 × 45	Q45	0.025	3.3
	39,000	EKMH100VSN393MQ50T	25.4 × 50	Q50	0.021	3.68
	22,000	EKMH100VSN223MR25T	30 × 25	R25	0.038	2.4
	27,000	EKMH100VSN273MR30T	30 × 30	R30	0.031	2.87
	33,000	EKMH100VSN333MR35T	30 × 35	R35	0.025	3.28
	39,000	EKMH100VSN393MR40T	30 × 40	R40	0.021	3.69
	47,000	EKMH100VSN473MR45T	30 × 45	R45	0.018	4.17
	56,000	EKMH100VSN563MR50T	30 × 50	R50	0.015	4.68
	27,000	EKMH100VSN273MA25T	35 × 25	A25	0.031	2.73
	33,000	EKMH100VSN333MA30T	35 × 30	A30	0.025	3.16
	39,000	EKMH100VSN393MA30T	35 × 30	A30	0.021	3.43
	47,000	EKMH100VSN473MA35T	35 × 35	A35	0.018	3.76
	56,000	EKMH100VSN563MA40T	35 × 40	A40	0.015	4.67
	68,000	EKMH100VSN683MA50T	35 × 50	A50	0.012	5.46

† For construction and terminal options, refer to the part numbering system for descriptions and codes.

\* Refer to diagram of dimensions for detailed case size specifications.

# KMH Series

## Standard Voltage Ratings - Snap Mount

Rated Voltage (WVDC)	Capacitance (µF)	Global Part Number†	Nominal Case Size* D × L (mm)	Case Size Code	Maximum ESR (Ω) at +20°C, 120Hz	Rated Ripple Current (A rms) at +105°C, 120Hz
10 Volts 13 Volts Surge	100,000	EKMH100VND104MA63T	35 × 63	A63	0.011	6.9
	120,000	EKMH100VND124MA80T	35 × 80	A80	0.009	8.08
	39,000	EKMH100VND393MB25T	40 × 25	B25	0.027	3.54
	56,000	EKMH100VND563MB30T	40 × 30	B30	0.021	4.44
	68,000	EKMH100VND683MB35T	40 × 35	B35	0.018	5.08
	82,000	EKMH100VND823MB40T	40 × 40	B40	0.015	5.75
	120,000	EKMH100VND124MB50T	40 × 50	B50	0.012	7.39
	150,000	EKMH100VND154MB63T	40 × 63	B63	0.009	8.82
180,000	EKMH100VND184MB80T	40 × 80	B80	0.008	10.51	
16 Volts 20 Volts Surge	6,800	EKMH160VSN682MP25T	22 × 25	P25	0.098	1.57
	10,000	EKMH160VSN103MP30T	22 × 30	P30	0.066	1.97
	12,000	EKMH160VSN123MP35T	22 × 35	P35	0.055	2.22
	15,000	EKMH160VSN153MP40T	22 × 40	P40	0.044	2.55
	18,000	EKMH160VSN183MP45T	22 × 45	P45	0.037	2.87
	10,000	EKMH160VSN103MQ25T	25.4 × 25	Q25	0.066	1.97
	12,000	EKMH160VSN123MQ30T	25.4 × 30	Q30	0.055	2.24
	15,000	EKMH160VSN153MQ35T	25.4 × 35	Q35	0.044	2.58
	18,000	EKMH160VSN183MQ40T	25.4 × 40	Q40	0.037	2.92
	22,000	EKMH160VSN223MQ45T	25.4 × 45	Q45	0.03	3.32
	27,000	EKMH160VSN273MQ50T	25.4 × 50	Q50	0.025	3.78
	12,000	EKMH160VSN123MR25T	30 × 25	R25	0.055	2.45
	15,000	EKMH160VSN153MR25T	30 × 25	R25	0.044	2.52
	18,000	EKMH160VSN183MR30T	30 × 30	R30	0.037	2.88
	22,000	EKMH160VSN223MR35T	30 × 35	R35	0.03	3.29
	27,000	EKMH160VSN273MR40T	30 × 40	R40	0.025	3.77
	33,000	EKMH160VSN333MR45T	30 × 45	R45	0.02	4.3
	39,000	EKMH160VSN393MR50T	30 × 50	R50	0.017	4.81
	18,000	EKMH160VSN183MA25T	35 × 25	A25	0.037	2.92
	22,000	EKMH160VSN223MA25T	35 × 25	A25	0.03	3.23
	27,000	EKMH160VSN273MA30T	35 × 30	A30	0.025	3.45
	33,000	EKMH160VSN333MA35T	35 × 35	A35	0.02	4.26
	39,000	EKMH160VSN393MA40T	35 × 40	A40	0.017	4.79
	47,000	EKMH160VSN473MA45T	35 × 45	A45	0.014	5.43
	68,000	EKMH160VND683MA63T	35 × 63	A63	0.012	6.36
	100,000	EKMH160VND104MA80T	35 × 80	A80	0.009	8.25
	33,000	EKMH160VND333MB25T	40 × 25	B25	0.027	3.64
	39,000	EKMH160VND333MB30T	40 × 30	B30	0.021	4.15
	47,000	EKMH160VND333MB35T	40 × 35	B35	0.018	4.72
	56,000	EKMH160VND333MB40T	40 × 40	B40	0.015	5.31
82,000	EKMH160VND333MB50T	40 × 50	B50	0.012	6.83	
100,000	EKMH160VND333MB63T	40 × 63	B63	0.010	8.05	
150,000	EKMH160VND333MB80T	40 × 80	B80	0.008	10.73	
25 Volts 32 Volts Surge	4,700	EKMH250VSN472MP25T	22 × 25	P25	0.106	1.5
	5,600	EKMH250VSN562MP25T	22 × 25	P25	0.089	1.63
	6,800	EKMH250VSN682MP30T	22 × 30	P30	0.073	1.86
	8,200	EKMH250VSN822MP35T	22 × 35	P35	0.061	2.11
	10,000	EKMH250VSN103MP40T	22 × 40	P40	0.05	2.39
	12,000	EKMH250VSN123MP45T	22 × 45	P45	0.041	2.69
	6,800	EKMH250VSN682MQ25T	25.4 × 25	Q25	0.073	1.87
	8,200	EKMH250VSN822MQ30T	25.4 × 30	Q30	0.061	2.12
	10,000	EKMH250VSN103MQ35T	25.4 × 35	Q35	0.05	2.42
	12,000	EKMH250VSN123MQ40T	25.4 × 40	Q40	0.041	2.74
	15,000	EKMH250VSN153MQ45T	25.4 × 45	Q45	0.033	3.15
	18,000	EKMH250VSN183MQ50T	25.4 × 50	Q50	0.028	3.54
	8,200	EKMH250VSN822MR25T	30 × 25	R25	0.061	2.15
	10,000	EKMH250VSN103MR25T	30 × 25	R25	0.05	2.37
	12,000	EKMH250VSN123MR30T	30 × 30	R30	0.041	2.7
	15,000	EKMH250VSN153MR35T	30 × 35	R35	0.033	3.13

† For construction and terminal options, refer to the part numbering system for descriptions and codes.

\* Refer to diagram of dimensions for detailed case size specifications.



# KMH Series

## Standard Voltage Ratings - Snap Mount

Rated Voltage (WVDC)	Capacitance (µF)	Global Part Number†	Nominal Case Size* D × L (mm)	Case Size Code	Maximum ESR (Ω) at +20°C, 120Hz	Rated Ripple Current (A rms) at +105°C, 120Hz
25 Volts 32 Volts Surge	18,000	EKM250VSN183MR40T	30 × 40	R40	0.028	3.54
	22,000	EKM250VSN223MR45T	30 × 45	R45	0.023	4.04
	12,000	EKM250VSN123MA25T	35 × 25	A25	0.041	2.74
	15,000	EKM250VSN153MA30T	35 × 30	A30	0.033	3.27
	18,000	EKM250VSN183MA30T	35 × 30	A30	0.028	3.58
	22,000	EKM250VSN223MA35T	35 × 35	A35	0.023	3.64
	27,000	EKM250VSN273MA45T	35 × 45	A45	0.018	4.73
	33,000	EKM250VSN333MA50T	35 × 50	A50	0.015	5.39
	47,000	EKM250VND473MA63T	35 × 63	A63	0.012	6.11
	68,000	EKM250VND683MA80T	35 × 80	A80	0.009	7.86
	18,000	EKM250VND183MB25T	40 × 25	B25	0.029	3.11
	27,000	EKM250VND273MB30T	40 × 30	B30	0.021	3.98
	33,000	EKM250VND333MB35T	40 × 35	B35	0.018	4.57
	39,000	EKM250VND393MB40T	40 × 40	B40	0.015	5.12
	47,000	EKM250VND473MB50T	40 × 50	B50	0.013	5.97
	68,000	EKM250VND683MB63T	40 × 63	B63	0.010	7.67
82,000	EKM250VND823MB80T	40 × 80	B80	0.008	9.16	
35 Volts 44 Volts Surge	3,300	EKM350VSN332MP25T	22 × 25	P25	0.126	1.4
	3,900	EKM350VSN392MP30T	22 × 30	P30	0.106	1.57
	4,700	EKM350VSN472MP30T	22 × 30	P30	0.088	1.72
	5,600	EKM350VSN562MP35T	22 × 35	P35	0.074	1.95
	6,800	EKM350VSN682MP40T	22 × 40	P40	0.061	2.2
	8,200	EKM350VSN822MP50T	22 × 50	P50	0.051	2.55
	4,700	EKM350VSN472MQ25T	25.4 × 25	Q25	0.088	1.8
	5,600	EKM350VSN562MQ30T	25.4 × 30	Q30	0.074	1.96
	6,800	EKM350VSN682MQ35T	25.4 × 35	Q35	0.061	2.23
	8,200	EKM350VSN822MQ40T	25.4 × 40	Q40	0.051	2.53
	10,000	EKM350VSN103MQ45T	25.4 × 45	Q45	0.041	2.87
	12,000	EKM350VSN123MQ50T	25.4 × 50	Q50	0.035	3.24
	5,600	EKM350VSN562MR25T	30 × 25	R25	0.074	1.99
	6,800	EKM350VSN682MR25T	30 × 25	R25	0.061	2.19
	8,200	EKM350VSN822MR30T	30 × 30	R30	0.051	2.75
	10,000	EKM350VSN103MR35T	30 × 35	R35	0.041	2.9
	12,000	EKM350VSN123MR40T	30 × 40	R40	0.035	3.23
	15,000	EKM350VSN153MR45T	30 × 45	R45	0.028	3.72
	8,200	EKM350VSN822MA25T	35 × 25	A25	0.051	2.75
	10,000	EKM350VSN103MA30T	35 × 30	A30	0.041	2.91
	12,000	EKM350VSN123MA30T	35 × 30	A30	0.035	2.99
	15,000	EKM350VSN153MA35T	35 × 35	A35	0.028	3.67
	18,000	EKM350VSN183MA40T	35 × 40	A40	0.023	4.37
	22,000	EKM350VSN223MA50T	35 × 50	A50	0.019	4.92
	33,000	EKM350VND333MA63T	35 × 63	A63	0.012	5.60
	39,000	EKM350VND393MA80T	35 × 80	A80	0.010	6.52
	12,000	EKM350VND123MB25T	40 × 25	B25	0.030	2.78
	18,000	EKM350VND183MB30T	40 × 30	B30	0.022	3.56
	22,000	EKM350VND223MB35T	40 × 35	B35	0.019	4.09
	27,000	EKM350VND273MB40T	40 × 40	B40	0.016	4.66
33,000	EKM350VND333MB50T	40 × 50	B50	0.013	5.48	
47,000	EKM350VND473MB63T	40 × 63	B63	0.010	6.98	
56,000	EKM350VND563MB80T	40 × 80	B80	0.008	8.29	
50 Volts 63 Volts Surge	1,800	EKM500VSN182MP25T	22 × 25	P25	0.184	1.33
	2,700	EKM500VSN272MP30T	22 × 30	P30	0.123	1.69
	3,300	EKM500VSN332MP35T	22 × 35	P35	0.10	1.93
	3,900	EKM500VSN392MP40T	22 × 40	P40	0.085	2.16
	4,700	EKM500VSN472MP45T	22 × 45	P45	0.071	2.43
	5,600	EKM500VSN562MP50T	22 × 50	P50	0.059	2.75
	2,700	EKM500VSN272MQ25T	25.4 × 25	Q25	0.123	1.7
	3,300	EKM500VSN332MQ30T	25.4 × 30	Q30	0.10	1.85

† For construction and terminal options, refer to the part numbering system for descriptions and codes.

\* Refer to diagram of dimensions for detailed case size specifications.

# KMH Series

## Standard Voltage Ratings - Snap Mount

Rated Voltage (WVDC)	Capacitance (µF)	Global Part Number†	Nominal Case Size* D × L (mm)	Case Size Code	Maximum ESR (Ω) at +20°C, 120Hz	Rated Ripple Current (A rms) at +105°C, 120Hz
<b>50 Volts</b> 63 Volts Surge	3,900	EKM500VSN392MQ35T	25.4 × 35	Q35	0.085	2.18
	4,700	EKM500VSN472MQ35T	25.4 × 35	Q35	0.071	2.39
	5,600	EKM500VSN562MQ40T	25.4 × 40	Q40	0.059	2.7
	6,800	EKM500VSN682MQ50T	25.4 × 50	Q50	0.049	3.3
	3,900	EKM500VSN392MR25T	30 × 25	R25	0.085	1.95
	4,700	EKM500VSN472MR30T	30 × 30	R30	0.071	2.25
	5,600	EKM500VSN562MR35T	30 × 35	R35	0.059	2.76
	6,800	EKM500VSN682MR40T	30 × 40	R40	0.049	3.3
	8,200	EKM500VSN822MR45T	30 × 45	R45	0.04	3.6
	10,000	EKM500VSN103MR50T	30 × 50	R50	0.033	4.04
	4,700	EKM500VSN472MA25T	35 × 25	A25	0.071	2.48
	5,600	EKM500VSN562MA25T	35 × 25	A25	0.059	2.7
	6,800	EKM500VSN682MA30T	35 × 30	A30	0.049	3.25
	8,200	EKM500VSN822MA35T	35 × 35	A35	0.04	3.55
	10,000	EKM500VSN103MA40T	35 × 40	A40	0.033	4.03
	12,000	EKM500VSN123MA45T	35 × 45	A45	0.028	4.55
	18,000	EKM500VND183MA63T	35 × 63	A63	0.014	4.63
	27,000	EKM500VND273MA80T	35 × 80	A80	0.011	6.06
	8,200	EKM500VND822MB25T	40 × 25	B25	0.035	2.57
	10,000	EKM500VND103MB30T	40 × 30	B30	0.027	2.97
12,000	EKM500VND123MB35T	40 × 35	B35	0.023	3.37	
15,000	EKM500VND153MB40T	40 × 40	B40	0.019	3.89	
22,000	EKM500VND223MB50T	40 × 50	B50	0.015	5.0	
27,000	EKM500VND273MB63T	40 × 63	B63	0.012	5.92	
39,000	EKM500VND393MB80T	40 × 80	B80	0.009	7.74	
<b>63 Volts</b> 79 Volts Surge	1,200	EKM630VSN122MP25T	22 × 25	P25	0.207	1.19
	1,500	EKM630VSN152MP25T	22 × 25	P25	0.166	1.33
	1,800	EKM630VSN182MP30T	22 × 30	P30	0.138	1.51
	2,200	EKM630VSN222MP35T	22 × 35	P35	0.113	1.73
	2,700	EKM630VSN272MP40T	22 × 40	P40	0.092	1.97
	3,300	EKM630VSN332MP50T	22 × 50	P50	0.075	2.29
	1,800	EKM630VSN182MQ25T	25.4 × 25	Q25	0.138	1.52
	2,200	EKM630VSN222MQ30T	25.4 × 30	Q30	0.113	1.74
	2,700	EKM630VSN272MQ35T	25.4 × 35	Q35	0.092	1.99
	3,300	EKM630VSN332MQ40T	25.4 × 40	Q40	0.075	2.27
	3,900	EKM630VSN392MQ45T	25.4 × 45	Q45	0.064	2.54
	4,700	EKM630VSN472MQ50T	25.4 × 50	Q50	0.053	2.86
	2,700	EKM630VSN272MR25T	30 × 25	R25	0.092	1.76
	3,300	EKM630VSN332MR30T	30 × 30	R30	0.075	2.24
	3,900	EKM630VSN392MR35T	30 × 35	R35	0.064	2.55
	4,700	EKM630VSN472MR40T	30 × 40	R40	0.053	2.86
	5,600	EKM630VSN562MR45T	30 × 45	R45	0.044	3.22
	6,800	EKM630VSN682MR50T	30 × 50	R50	0.037	3.65
	3,300	EKM630VSN332MA25T	35 × 25	A25	0.075	2.06
	3,900	EKM630VSN392MA25T	35 × 25	A25	0.064	2.24
	4,700	EKM630VSN472MA30T	35 × 30	A30	0.053	2.79
	5,600	EKM630VSN562MA35T	35 × 35	A35	0.044	3.19
	6,800	EKM630VSN682MA40T	35 × 40	A40	0.037	3.64
	8,200	EKM630VSN822MA45T	35 × 45	A45	0.03	3.9
	10,000	EKM630VSN103MA50T	35 × 50	A50	0.025	4.4
	15,000	EKM630VND153MA63T	35 × 63	A63	0.014	4.88
	18,000	EKM630VND183MA80T	35 × 80	A80	0.012	5.72
	5,600	EKM630VND562MB25T	40 × 25	B25	0.038	2.45
	8,200	EKM630VND822MB30T	40 × 30	B30	0.028	3.1
	10,000	EKM630VND103MB35T	40 × 35	B35	0.026	3.56
12,000	EKM630VND123MB40T	40 × 40	B40	0.02	4.01	
15,000	EKM630VND153MB50T	40 × 50	B50	0.016	4.77	
18,000	EKM630VND183MB63T	40 × 63	B63	0.013	5.58	
27,000	EKM630VND273MB80T	40 × 80	B80	0.010	7.43	

† For construction and terminal options, refer to the part numbering system for descriptions and codes.

\* Refer to diagram of dimensions for detailed case size specifications.

KMH  
SNAP MOUNT 105°C



# KMH Series

## Standard Voltage Ratings - Snap Mount

Rated Voltage (WVDC)	Capacitance (µF)	Global Part Number†	Nominal Case Size* D × L (mm)	Case Size Code	Maximum ESR (Ω) at +20°C, 120Hz	Rated Ripple Current (A rms) at +105°C, 120Hz
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<b>80 Volts 100 Volts Surge</b>	820	EKMH800VSN821MP25T	22 × 25	P25	0.303	1.11
	1,000	EKMH800VSN102MP25T	22 × 25	P25	0.249	1.22
	1,200	EKMH800VSN122MP30T	22 × 30	P30	0.207	1.38
	1,500	EKMH800VSN152MP35T	22 × 35	P35	0.166	1.59
	1,800	EKMH800VSN182MP40T	22 × 40	P40	0.138	1.8
	2,200	EKMH800VSN222MP45T	22 × 45	P45	0.113	2.04
	1,200	EKMH800VSN122MQ25T	25.4 × 25	Q25	0.207	1.39
	1,500	EKMH800VSN152MQ30T	25.4 × 30	Q30	0.166	1.61
	1,800	EKMH800VSN182MQ30T	25.4 × 30	Q30	0.138	1.76
	2,200	EKMH800VSN222MQ35T	25.4 × 35	Q35	0.113	2.01
	2,700	EKMH800VSN272MQ45T	25.4 × 45	Q45	0.092	2.36
	3,300	EKMH800VSN332MQ50T	25.4 × 50	Q50	0.075	2.68
	1,800	EKMH800VSN182MR25T	30 × 25	R25	0.138	1.65
	2,200	EKMH800VSN222MR30T	30 × 30	R30	0.113	2.05
	2,700	EKMH800VSN272MR35T	30 × 35	R35	0.092	2.35
	3,300	EKMH800VSN332MR40T	30 × 40	R40	0.075	2.68
	3,900	EKMH800VSN392MR45T	30 × 45	R45	0.064	3.0
	4,700	EKMH800VSN472MR50T	30 × 50	R50	0.053	3.39
	2,200	EKMH800VSN222MA25T	35 × 25	A25	0.113	2.07
	2,700	EKMH800VSN272MA25T	35 × 25	A25	0.092	2.29
	3,300	EKMH800VSN332MA30T	35 × 30	A30	0.075	2.45
	3,900	EKMH800VSN392MA35T	35 × 35	A35	0.064	2.98
	4,700	EKMH800VSN472MA40T	35 × 40	A40	0.053	3.38
	5,600	EKMH800VSN562MA45T	35 × 45	A45	0.044	3.8
	6,800	EKMH800VSN682MA50T	35 × 50	A50	0.037	3.9
	8,200	EKMH800VND822MA63T	35 × 63	A63	0.03	4.42
	12,000	EKMH800VND103MA80T	35 × 80	A80	0.021	5.72
	3,900	EKMH800VND392MB25T	40 × 25	B25	0.064	2.5
	4,700	EKMH800VND472MB30T	40 × 30	B30	0.053	2.88
	5,600	EKMH800VND562MB35T	40 × 35	B35	0.044	3.26
6,800	EKMH800VND682MB40T	40 × 40	B40	0.037	3.7	
10,000	EKMH800VND103MB50T	40 × 50	B50	0.025	4.77	
12,000	EKMH800VND123MB63T	40 × 63	B63	0.021	5.58	
18,000	EKMH800VND183MB80T	40 × 80	B80	0.014	7.43	

<b>100 Volts 125 Volts Surge</b>	560	EKMH101VSN561MP25T	22 × 25	P25	0.444	1.05
	820	EKMH101VSN821MP30T	22 × 30	P30	0.303	1.32
	1,000	EKMH101VSN102MP35T	22 × 35	P35	0.249	1.5
	1,200	EKMH101VSN122MP40T	22 × 40	P40	0.207	1.69
	1,500	EKMH101VSN152MP45T	22 × 45	P45	0.166	1.94
	820	EKMH101VSN821MQ25T	25.4 × 25	Q25	0.303	1.33
	1,000	EKMH101VSN102MQ30T	25.4 × 30	Q30	0.249	1.51
	1,200	EKMH101VSN122MQ35T	25.4 × 35	Q35	0.207	1.71
	1,500	EKMH101VSN152MQ40T	25.4 × 40	Q40	0.166	1.98
	1,800	EKMH101VSN182MQ45T	25.4 × 45	Q45	0.138	2.23
	2,200	EKMH101VSN222MQ50T	25.4 × 50	Q50	0.113	2.53
	1,200	EKMH101VSN122MR25T	30 × 25	R25	0.207	1.68
	1,500	EKMH101VSN152MR30T	30 × 30	R30	0.166	1.95
	1,800	EKMH101VSN182MR35T	30 × 35	R35	0.138	2.5
	2,200	EKMH101VSN222MR40T	30 × 40	R40	0.113	2.7
	2,700	EKMH101VSN272MR45T	30 × 45	R45	0.092	2.88
	3,300	EKMH101VSN332MR50T	30 × 50	R50	0.075	3.28
	1,500	EKMH101VSN152MA25T	35 × 25	A25	0.166	1.98
	1,800	EKMH101VSN182MA25T	35 × 25	A25	0.138	2.17
	2,200	EKMH101VSN222MA30T	35 × 30	A30	0.113	2.5
	2,700	EKMH101VSN272MA35T	35 × 35	A35	0.092	2.86
	3,300	EKMH101VSN332MA40T	35 × 40	A40	0.075	3.27
	3,900	EKMH101VSN392MA45T	35 × 45	A45	0.064	3.67
	4,700	EKMH101VSN472MA50T	35 × 50	A50	0.053	3.8

† For construction and terminal options, refer to the part numbering system for descriptions and codes.

\* Refer to diagram of dimensions for detailed case size specifications.

# KMH Series

## Standard Voltage Ratings - Snap Mount

Rated Voltage (WVDC)	Capacitance (µF)	Global Part Number†	Nominal Case Size* D × L (mm)	Case Size Code	Maximum ESR (Ω) at +20°C, 120Hz	Rated Ripple Current (A rms) at +105°C, 120Hz
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<b>100 Volts</b> 125 Volts Surge	5,600	EKM101VND562MA63T	35 × 63	A63	0.044	4.08
	6,800	EKM101VND682MA80T	35 × 80	A80	0.037	4.81
	2,200	EKM101VND222MB25T	40 × 25	B25	0.113	2.1
	2,700	EKM101VND272MB30T	40 × 30	B30	0.092	2.44
	3,300	EKM101VND332MB35T	40 × 35	B35	0.075	2.8
	4,700	EKM101VND472MB40T	40 × 40	B40	0.053	3.44
	5,600	EKM101VND562MB50T	40 × 50	B50	0.044	3.99
	8,200	EKM101VND822MB63T	40 × 63	B63	0.03	5.16
	10,000	EKM101VND103MB80T	40 × 80	B80	0.025	6.19

<b>160 Volts</b> 200 Volts Surge	220	EKM161VSN221MP20T	22 × 20	P20	1.13	0.8
	270	EKM161VSN271MP25T	22 × 25	P25	0.614	1.09
	330	EKM161VSN331MP25T	22 × 25	P25	0.502	1.2
	390	EKM161VSN391MP30T	22 × 30	P30	0.425	1.3
	470	EKM161VSN471MP35T	22 × 35	P35	0.353	1.4
	560	EKM161VSN561MP40T	22 × 40	P40	0.296	1.5
	680	EKM161VSN681MP45T	22 × 45	P45	0.244	1.71
	820	EKM161VSN821MP50T	22 × 50	P50	0.202	1.93
	330	EKM161VSN331MQ20T	25.4 × 20	Q20	0.753	1.02
	390	EKM161VSN391MQ25T	25.4 × 25	Q25	0.425	1.28
	470	EKM161VSN471MQ25T	25.4 × 25	Q25	0.353	1.41
	560	EKM161VSN561MQ30T	25.4 × 30	Q30	0.296	1.51
	680	EKM161VSN681MQ35T	25.4 × 35	Q35	0.244	1.7
	820	EKM161VSN821MQ40T	25.4 × 40	Q40	0.202	2.01
	1,000	EKM161VSN102MQ45T	25.4 × 45	Q45	0.166	2.2
	1,200	EKM161VSN122MQ50T	25.4 × 50	Q50	0.138	2.45
	390	EKM161VSN391MR20T	30 × 20	R20	0.638	1.17
	470	EKM161VSN471MR20T	30 × 20	R20	0.529	1.28
	560	EKM161VSN561MR25T	30 × 25	R25	0.296	1.56
	680	EKM161VSN681MR25T	30 × 25	R25	0.244	1.72
	820	EKM161VSN821MR30T	30 × 30	R30	0.202	2.0
	1,000	EKM161VSN102MR35T	30 × 35	R35	0.166	2.22
	1,200	EKM161VSN122MR40T	30 × 40	R40	0.138	2.44
	1,500	EKM161VSN152MR45T	30 × 45	R45	0.111	2.82
	1,800	EKM161VSN182MR50T	30 × 50	R50	0.092	3.31
	560	EKM161VSN561MA20T	35 × 20	A20	0.444	1.54
	680	EKM161VSN681MA20T	35 × 20	A20	0.366	1.7
	820	EKM161VSN821MA25T	35 × 25	A25	0.303	1.91
	1,000	EKM161VSN102MA25T	35 × 25	A25	0.249	2.11
	1,200	EKM161VSN122MA30T	35 × 30	A30	0.207	2.44
	1,500	EKM161VSN152MA35T	35 × 35	A35	0.166	2.5
	1,800	EKM161VSN182MA45T	35 × 45	A45	0.138	3.31
	2,200	EKM161VSN222MA50T	35 × 50	A50	0.113	3.77
	3,300	EKM161VND332MA63T	35 × 63	A63	0.075	3.96
	3,900	EKM161VND392MA80T	35 × 80	A80	0.064	4.61
	1,200	EKM161VND122MB25T	40 × 25	B25	0.207	1.96
	1,800	EKM161VND182MB30T	40 × 30	B30	0.138	2.52
	2,200	EKM161VND222MB35T	40 × 35	B35	0.113	2.89
	2,700	EKM161VND272MB40T	40 × 40	B40	0.092	3.3
	3,300	EKM161VND332MB50T	40 × 50	B50	0.075	3.87
4,700	EKM161VND472MB63T	40 × 63	B63	0.053	4.94	
5,600	EKM161VND562MB80T	40 × 80	B80	0.044	5.86	

<b>180 Volts</b> 225 Volts Surge	180	EKM181VSN181MP20T	22 × 20	P20	1.381	0.73
	220	EKM181VSN221MP20T	22 × 20	P20	1.13	0.8
	270	EKM181VSN271MP25T	22 × 25	P25	0.614	0.96
	330	EKM181VSN331MP25T	22 × 25	P25	0.502	1.06
	390	EKM181VSN391MP30T	22 × 30	P30	0.425	1.3
	470	EKM181VSN471MP35T	22 × 35	P35	0.353	1.35

† For construction and terminal options, refer to the part numbering system for descriptions and codes.

\* Refer to diagram of dimensions for detailed case size specifications.

KMH  
SNAP MOUNT 105°C

# KMH Series

## Standard Voltage Ratings - Snap Mount

Rated Voltage (WVDC)	Capacitance (µF)	Global Part Number†	Nominal Case Size* D × L (mm)	Case Size Code	Maximum ESR (Ω) at +20°C, 120Hz	Rated Ripple Current (A rms) at +105°C, 120Hz
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<b>180 Volts 225 Volts Surge</b>	560	EKMH181VSN561MP40T	22 × 40	P40	0.296	1.51
	680	EKMH181VSN681MP45T	22 × 45	P45	0.244	1.71
	820	EKMH181VSN821MP50T	22 × 50	P50	0.202	1.97
	270	EKMH181VSN271MQ20T	25.4 × 20	Q20	0.921	0.92
	330	EKMH181VSN331MQ25T	25.4 × 25	Q25	0.502	1.2
	390	EKMH181VSN391MQ25T	25.4 × 25	Q25	0.425	1.3
	470	EKMH181VSN471MQ30T	25.4 × 30	Q30	0.353	1.4
	560	EKMH181VSN561MQ35T	25.4 × 35	Q35	0.296	1.53
	680	EKMH181VSN681MQ40T	25.4 × 40	Q40	0.244	1.74
	820	EKMH181VSN821MQ45T	25.4 × 45	Q45	0.202	1.97
	1,000	EKMH181VSN102MQ50T	25.4 × 50	Q50	0.166	2.23
	390	EKMH181VSN391MR20T	30 × 20	R20	0.638	1.17
	470	EKMH181VSN471MR25T	30 × 25	R25	0.353	1.38
	560	EKMH181VSN561MR25T	30 × 25	R25	0.296	1.51
	680	EKMH181VSN681MR30T	30 × 30	R30	0.244	1.72
	820	EKMH181VSN821MR35T	30 × 35	R35	0.202	2.0
	1,000	EKMH181VSN102MR40T	30 × 40	R40	0.166	2.24
	1,200	EKMH181VSN122MR45T	30 × 45	R45	0.138	2.52
	1,500	EKMH181VSN152MR50T	30 × 50	R50	0.111	2.89
	470	EKMH181VSN471MA20T	35 × 20	A20	0.529	1.41
	560	EKMH181VSN561MA20T	35 × 20	A20	0.444	1.53
	680	EKMH181VSN681MA25T	35 × 25	A25	0.366	1.74
	820	EKMH181VSN821MA25T	35 × 25	A25	0.303	1.91
	1,000	EKMH181VSN102MA30T	35 × 30	A30	0.249	2.26
	1,200	EKMH181VSN122MA35T	35 × 35	A35	0.207	2.5
	1,500	EKMH181VSN152MA40T	35 × 40	A40	0.166	2.89
	1,800	EKMH181VSN182MA40T	35 × 40	A40	0.138	3.17
	2,200	EKMH181VSN222MA50T	35 × 50	A50	0.113	3.6
	2,700	EKMH181VND272MA63T	35 × 63	A63	0.092	4.01
	3,300	EKMH181VND332MA80T	35 × 80	A80	0.075	4.74
	1,000	EKMH181VND102MB25T	40 × 25	B25	0.249	2.01
	1,500	EKMH181VND152MB30T	40 × 30	B30	0.166	2.57
	1,800	EKMH181VND182MB35T	40 × 35	B35	0.138	2.92
	2,200	EKMH181VND222MB40T	40 × 40	B40	0.113	3.33
2,700	EKMH181VND272MB50T	40 × 50	B50	0.092	3.92	
3,900	EKMH181VND392MB63T	40 × 63	B63	0.064	5.03	
4,700	EKMH181VND472MB80T	40 × 80	B80	0.053	6.01	

<b>200 Volts 250 Volts Surge</b>	150	EKMH201VSN151MP20T	22 × 20	P20	1.658	0.66
	180	EKMH201VSN181MP20T	22 × 20	P20	1.381	0.72
	220	EKMH201VSN221MP25T	22 × 25	P25	0.753	0.79
	270	EKMH201VSN271MP25T	22 × 25	P25	0.614	0.87
	330	EKMH201VSN331MP30T	22 × 30	P30	0.502	1.2
	390	EKMH201VSN391MP35T	22 × 35	P35	0.425	1.31
	470	EKMH201VSN471MP40T	22 × 40	P40	0.353	1.4
	560	EKMH201VSN561MP45T	22 × 45	P45	0.296	1.56
	680	EKMH201VSN681MP50T	22 × 50	P50	0.244	1.74
	220	EKMH201VSN221MQ20T	25.4 × 20	Q20	1.13	0.83
	270	EKMH201VSN271MQ25T	25.4 × 25	Q25	0.614	1.09
	330	EKMH201VSN331MQ25T	25.4 × 25	Q25	0.502	1.21
	390	EKMH201VSN391MQ25T	25.4 × 25	Q25	0.425	1.31
	470	EKMH201VSN471MQ30T	25.4 × 30	Q30	0.353	1.41
	560	EKMH201VSN561MQ35T	25.4 × 35	Q35	0.296	1.53
	680	EKMH201VSN681MQ40T	25.4 × 40	Q40	0.244	1.74
	820	EKMH201VSN821MQ50T	25.4 × 50	Q50	0.202	2.04
	330	EKMH201VSN331MR20T	30 × 20	R20	0.753	1.08
	390	EKMH201VSN391MR25T	30 × 25	R25	0.425	1.37
	470	EKMH201VSN471MR25T	30 × 25	R25	0.353	1.5
	560	EKMH201VSN561MR25T	30 × 25	R25	0.296	1.63

† For construction and terminal options, refer to the part numbering system for descriptions and codes.

\* Refer to diagram of dimensions for detailed case size specifications.

# KMH Series

## Standard Voltage Ratings - Snap Mount

Rated Voltage (WVDC)	Capacitance (µF)	Global Part Number†	Nominal Case Size* D × L (mm)	Case Size Code	Maximum ESR (Ω) at +20°C, 120Hz	Rated Ripple Current (A rms) at +105°C, 120Hz
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<b>200 Volts 250 Volts Surge</b>	680	EKM201VSN681MR30T	30 × 30	R30	0.244	1.74
	820	EKM201VSN821MR35T	30 × 35	R35	0.202	2.0
	1,000	EKM201VSN102MR45T	30 × 45	R45	0.166	2.3
	1,200	EKM201VSN122MR50T	30 × 50	R50	0.138	2.6
	470	EKM201VSN471MA20T	35 × 20	A20	0.529	1.41
	560	EKM201VSN561MA25T	35 × 25	A25	0.444	1.56
	680	EKM201VSN681MA25T	35 × 25	A25	0.366	1.72
	820	EKM201VSN821MA30T	35 × 30	A30	0.303	2.04
	1,000	EKM201VSN102MA35T	35 × 35	A35	0.249	2.3
	1,200	EKM201VSN122MA40T	35 × 40	A40	0.207	2.65
	1,500	EKM201VSN152MA45T	35 × 45	A45	0.166	3.08
	1,800	EKM201VSN182MA50T	35 × 50	A50	0.138	3.47
	2,200	EKM201VND222MA63T	35 × 63	A63	0.113	3.62
	3,300	EKM201VND332MA80T	35 × 80	A80	0.075	4.74
	1,000	EKM201VND102MB25T	40 × 25	B25	0.249	2.01
	1,200	EKM201VND122MB30T	40 × 30	B30	0.207	2.3
	1,500	EKM201VND152MB35T	40 × 35	B35	0.166	2.67
	1,800	EKM201VND182MB40T	40 × 40	B40	0.138	3.01
	2,700	EKM201VND272MB50T	40 × 50	B50	0.092	3.92
	3,300	EKM201VND332MB63T	40 × 63	B63	0.075	4.63
4,700	EKM201VND472MB80T	40 × 80	B80	0.053	6.01	

<b>250 Volts 300 Volts Surge</b>	120	EKM251VSN121MP20T	22 × 20	P20	2.072	0.59
	150	EKM251VSN151MP25T	22 × 25	P25	1.105	0.71
	180	EKM251VSN181MP25T	22 × 25	P25	0.921	0.78
	220	EKM251VSN221MP30T	22 × 30	P30	0.753	0.95
	270	EKM251VSN271MP35T	22 × 35	P35	0.614	1.14
	330	EKM251VSN331MP40T	22 × 40	P40	0.502	1.26
	390	EKM251VSN391MP45T	22 × 45	P45	0.425	1.49
	470	EKM251VSN471MP50T	22 × 50	P50	0.353	1.57
	180	EKM251VSN181MQ20T	25.4 × 20	Q20	1.381	0.75
	220	EKM251VSN221MQ25T	25.4 × 25	Q25	0.753	0.95
	270	EKM251VSN271MQ25T	25.4 × 25	Q25	0.614	1.05
	330	EKM251VSN331MQ30T	25.4 × 30	Q30	0.502	1.2
	390	EKM251VSN391MQ35T	25.4 × 35	Q35	0.425	1.49
	470	EKM251VSN471MQ40T	25.4 × 40	Q40	0.353	1.57
	560	EKM251VSN561MQ45T	25.4 × 45	Q45	0.296	1.79
	680	EKM251VSN681MQ50T	25.4 × 50	Q50	0.244	1.84
	220	EKM251VSN221MR20T	30 × 20	R20	1.13	0.88
	270	EKM251VSN271MR20T	30 × 20	R20	0.921	0.97
	330	EKM251VSN331MR25T	30 × 25	R25	0.502	1.26
	390	EKM251VSN391MR25T	30 × 25	R25	0.425	1.37
	470	EKM251VSN471MR30T	30 × 30	R30	0.353	1.57
	560	EKM251VSN561MR35T	30 × 35	R35	0.296	1.79
	680	EKM251VSN681MR40T	30 × 40	R40	0.244	2.0
	820	EKM251VSN821MR45T	30 × 45	R45	0.202	2.16
	330	EKM251VSN331MA20T	35 × 20	A20	0.753	1.18
	390	EKM251VSN391MA25T	35 × 25	A25	0.638	1.43
	470	EKM251VSN471MA25T	35 × 25	A25	0.529	1.57
	560	EKM251VSN561MA30T	35 × 30	A30	0.444	1.79
	680	EKM251VSN681MA30T	35 × 30	A30	0.366	1.97
	820	EKM251VSN821MA35T	35 × 35	A35	0.303	1.98
	1,000	EKM251VSN102MA40T	35 × 40	A40	0.249	2.3
	1,200	EKM251VSN122MA45T	35 × 45	A45	0.207	2.43
	1,800	EKM251VND182MA63T	35 × 63	A63	0.138	3.27
	2,200	EKM251VND222MA80T	35 × 80	A80	0.113	3.87
	680	EKM251VND681MB25T	40 × 25	B25	0.366	1.65
	1,000	EKM251VND102MB30T	40 × 30	B30	0.249	2.1
	1,200	EKM251VND122MB35T	40 × 35	B35	0.207	2.39

† For construction and terminal options, refer to the part numbering system for descriptions and codes.

\* Refer to diagram of dimensions for detailed case size specifications.

KMH  
SNAP MOUNT 105°C

# KMH Series

## Standard Voltage Ratings - Snap Mount

Rated Voltage (WVDC)	Capacitance (µF)	Global Part Number†	Nominal Case Size* D × L (mm)	Case Size Code	Maximum ESR (Ω) at +20°C, 120Hz	Rated Ripple Current (A rms) at +105°C, 120Hz
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<b>250 Volts</b> 300 Volts Surge	1,500	EKMH251VND152MB40T	40 × 40	B40	0.166	2.75
	1,800	EKMH251VND182MB50T	40 × 50	B50	0.138	3.2
	2,200	EKMH251VND222MB63T	40 × 63	B63	0.113	3.78
	3,300	EKMH251VND332MB80T	40 × 80	B80	0.075	5.03

<b>315 Volts</b> 365 Volts Surge	68	EKMH3B1VSN680MP20T	22 × 20	P20	3.656	0.44
	82	EKMH3B1VSN820MP25T	22 × 25	P25	3.032	0.64
	100	EKMH3B1VSN101MP30T	22 × 30	P30	2.486	0.68
	120	EKMH3B1VSN121MP30T	22 × 30	P30	2.072	0.75
	150	EKMH3B1VSN151MP35T	22 × 35	P35	1.658	0.82
	180	EKMH3B1VSN181MP40T	22 × 40	P40	1.381	0.91
	220	EKMH3B1VSN221MP45T	22 × 45	P45	1.13	1.02
	270	EKMH3B1VSN271MP50T	22 × 50	P50	0.921	1.16
	100	EKMH3B1VSN101MQ20T	25.4 × 20	Q20	2.486	0.56
	120	EKMH3B1VSN121MQ25T	25.4 × 25	Q25	2.072	0.76
	150	EKMH3B1VSN151MQ30T	25.4 × 30	Q30	1.658	0.8
	180	EKMH3B1VSN181MQ30T	25.4 × 30	Q30	1.381	0.88
	220	EKMH3B1VSN221MQ35T	25.4 × 35	Q35	1.13	1.02
	270	EKMH3B1VSN271MQ40T	25.4 × 40	Q40	0.921	1.15
	330	EKMH3B1VSN331MQ50T	25.4 × 50	Q50	0.753	1.33
	120	EKMH3B1VSN121MR20T	30 × 20	R20	2.072	0.65
	150	EKMH3B1VSN151MR25T	30 × 25	R25	1.658	0.82
	180	EKMH3B1VSN181MR25T	30 × 25	R25	1.381	0.9
	220	EKMH3B1VSN221MR30T	30 × 30	R30	1.13	1.02
	270	EKMH3B1VSN271MR35T	30 × 35	R35	0.921	1.17
	330	EKMH3B1VSN331MR35T	30 × 35	R35	0.753	1.3
	390	EKMH3B1VSN391MR40T	30 × 40	R40	0.638	1.46
	470	EKMH3B1VSN471MR50T	30 × 50	R50	0.529	1.7
	180	EKMH3B1VSN181MA20T	35 × 20	A20	1.381	0.83
	220	EKMH3B1VSN221MA25T	35 × 25	A25	1.13	1.03
	270	EKMH3B1VSN271MA25T	35 × 25	A25	0.921	1.15
	330	EKMH3B1VSN331MA30T	35 × 30	A30	0.753	1.32
	390	EKMH3B1VSN391MA35T	35 × 35	A35	0.638	1.47
	470	EKMH3B1VSN471MA40T	35 × 40	A40	0.529	1.69
	560	EKMH3B1VSN561MA45T	35 × 45	A45	0.444	1.9
	680	EKMH3B1VSN681MA50T	35 × 50	A50	0.366	2.15
	1,000	EKMH3B1VND102MA63T	35 × 63	A63	0.249	2.82
	1,200	EKMH3B1VND122MA80T	35 × 80	A80	0.207	3.3
	330	EKMH3B1VND331MB25T	40 × 25	B25	0.753	1.33
	470	EKMH3B1VND471MB30T	40 × 30	B30	0.529	1.66
	560	EKMH3B1VND561MB35T	40 × 35	B35	0.444	1.88
	680	EKMH3B1VND681MB40T	40 × 40	B40	0.366	2.14
	1,000	EKMH3B1VND102MB50T	40 × 50	B50	0.249	2.75
	1,500	EKMH3B1VND152MB63T	40 × 63	B63	0.166	3.6
	1,800	EKMH3B1VND182MB80T	40 × 80	B80	0.138	4.29

<b>350 Volts</b> 400 Volts Surge	56	EKMH351VSN560MP20T	22 × 20	P20	4.44	0.4
	68	EKMH351VSN680MP25T	22 × 25	P25	3.656	0.51
	82	EKMH351VSN820MP25T	22 × 25	P25	3.032	0.56
	100	EKMH351VSN101MP30T	22 × 30	P30	2.486	0.69
	120	EKMH351VSN121MP35T	22 × 35	P35	2.072	0.75
	150	EKMH351VSN151MP40T	22 × 40	P40	1.658	0.82
	180	EKMH351VSN181MP45T	22 × 45	P45	1.381	0.92
	220	EKMH351VSN221MP50T	22 × 50	P50	1.13	1.05
	82	EKMH351VSN820MQ20T	25.4 × 20	Q20	3.032	0.51
	100	EKMH351VSN101MQ25T	25.4 × 25	Q25	2.486	0.69
	120	EKMH351VSN121MQ25T	25.4 × 25	Q25	2.072	0.75
	150	EKMH351VSN151MQ30T	25.4 × 30	Q30	1.658	0.83
	180	EKMH351VSN181MQ35T	25.4 × 35	Q35	1.381	0.92

† For construction and terminal options, refer to the part numbering system for descriptions and codes.

\* Refer to diagram of dimensions for detailed case size specifications.

# KMH Series

## Standard Voltage Ratings - Snap Mount

Rated Voltage (WVDC)	Capacitance (µF)	Global Part Number†	Nominal Case Size* D × L (mm)	Case Size Code	Maximum ESR (Ω) at +20°C, 120Hz	Rated Ripple Current (A rms) at +105°C, 120Hz
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<b>350 Volts 400 Volts Surge</b>	220	EKM351VSN221MQ40T	25.4 × 40	Q40	1.13	1.04
	270	EKM351VSN271MQ45T	25.4 × 45	Q45	0.921	1.18
	100	EKM351VSN101MR20T	30 × 20	R20	2.486	0.59
	120	EKM351VSN121MR20T	30 × 20	R20	2.072	0.64
	150	EKM351VSN151MR25T	30 × 25	R25	1.658	0.83
	180	EKM351VSN181MR25T	30 × 25	R25	1.381	0.91
	220	EKM351VSN221MR30T	30 × 30	R30	1.13	1.02
	270	EKM351VSN271MR35T	30 × 35	R35	0.921	1.17
	330	EKM351VSN331MR40T	30 × 40	R40	0.753	1.34
	390	EKM351VSN391MR45T	30 × 45	R45	0.638	1.51
	150	EKM351VSN151MA20T	35 × 20	A20	1.658	0.76
	180	EKM351VSN181MA25T	35 × 25	A25	1.381	0.94
	220	EKM351VSN221MA25T	35 × 25	A25	1.13	1.04
	270	EKM351VSN271MA30T	35 × 30	A30	0.921	1.2
	330	EKM351VSN331MA30T	35 × 30	A30	0.753	1.33
	390	EKM351VSN391MA35T	35 × 35	A35	0.638	1.47
	470	EKM351VSN471MA40T	35 × 40	A40	0.529	1.69
	560	EKM351VSN561MA45T	35 × 45	A45	0.444	1.9
	1,000	EKM351VND102MA63T	35 × 63	A63	0.249	2.82
	1,200	EKM351VND122MA80T	35 × 80	A80	0.207	3.3
	330	EKM351VND331MB25T	40 × 25	B25	0.753	1.33
	470	EKM351VND471MB30T	40 × 30	B30	0.529	1.66
	560	EKM351VND561MB35T	40 × 35	B35	0.444	1.88
	680	EKM351VND681MB40T	40 × 40	B40	0.366	2.14
1,000	EKM351VND102MB50T	40 × 50	B50	0.249	2.75	
1,200	EKM351VND122MB63T	40 × 63	B63	0.207	3.22	
1,800	EKM351VND182MB80T	40 × 80	B80	0.138	4.29	

<b>400 Volts 450 Volts Surge</b>	47	EKM401VSN470MP20T	22 × 20	P20	5.29	0.37
	56	EKM401VSN560MP20T	22 × 20	P20	4.44	0.4
	68	EKM401VSN680MP25T	22 × 25	P25	3.656	0.51
	82	EKM401VSN820MP30T	22 × 30	P30	3.032	0.58
	100	EKM401VSN101MP30T	22 × 30	P30	2.486	0.64
	120	EKM401VSN121MP35T	22 × 35	P35	2.072	0.72
	150	EKM401VSN151MP40T	22 × 40	P40	1.658	0.82
	180	EKM401VSN181MP50T	22 × 50	P50	1.381	0.95
	68	EKM401VSN680MQ20T	25.4 × 20	Q20	3.656	0.46
	82	EKM401VSN820MQ25T	25.4 × 25	Q25	3.032	0.64
	100	EKM401VSN101MQ25T	25.4 × 25	Q25	2.486	0.67
	120	EKM401VSN121MQ30T	25.4 × 30	Q30	2.072	0.72
	150	EKM401VSN151MQ35T	25.4 × 35	Q35	1.658	0.84
	180	EKM401VSN181MQ40T	25.4 × 40	Q40	1.381	0.94
	220	EKM401VSN221MQ45T	25.4 × 45	Q45	1.13	1.07
	270	EKM401VSN271MQ50T	25.4 × 50	Q50	0.921	1.21
	100	EKM401VSN101MR20T	30 × 20	R20	2.486	0.59
	120	EKM401VSN121MR25T	30 × 25	R25	2.072	0.76
	150	EKM401VSN151MR25T	30 × 25	R25	1.658	0.84
	180	EKM401VSN181MR30T	30 × 30	R30	1.381	0.92
	220	EKM401VSN221MR35T	30 × 35	R35	1.13	1.06
	270	EKM401VSN271MR40T	30 × 40	R40	0.921	1.21
	330	EKM401VSN331MR45T	30 × 45	R45	0.753	1.39
	390	EKM401VSN391MR50T	30 × 50	R50	0.638	1.55
	150	EKM401VSN151MA20T	35 × 20	A20	1.658	0.76
	180	EKM401VSN181MA25T	35 × 25	A25	1.381	0.94
	220	EKM401VSN221MA30T	35 × 30	A30	1.13	1.08
	270	EKM401VSN271MA30T	35 × 30	A30	0.921	1.2
	330	EKM401VSN331MA35T	35 × 35	A35	0.753	1.35
	390	EKM401VSN391MA40T	35 × 40	A40	0.638	1.54
	470	EKM401VSN471MA45T	35 × 45	A45	0.529	1.74

† For construction and terminal options, refer to the part numbering system for descriptions and codes.

\* Refer to diagram of dimensions for detailed case size specifications.



# KMH Series

## Standard Voltage Ratings - Snap Mount

Rated Voltage (WVDC)	Capacitance (µF)	Global Part Number†	Nominal Case Size* D × L (mm)	Case Size Code	Maximum ESR (Ω) at +20°C, 120Hz	Rated Ripple Current (A rms) at +105°C, 120Hz
400 Volts 450 Volts Surge	820	EKMH401VND821MA63T	35 × 63	A63	0.303	2.55
	1,000	EKMH401VND102MA80T	35 × 80	A80	0.249	3.01
	270	EKMH401VND271MB25T	40 × 25	B25	0.921	1.2
	390	EKMH401VND391MB30T	40 × 30	B30	0.638	1.51
	470	EKMH401VND471MB35T	40 × 35	B35	0.529	1.72
	560	EKMH401VND561MB40T	40 × 40	B40	0.444	1.94
	820	EKMH401VND821MB50T	40 × 50	B50	0.303	2.49
	1,200	EKMH401VND122MB63T	40 × 63	B63	0.207	3.22
1,500	EKMH401VND152MB80T	40 × 80	B80	0.166	3.92	
450 Volts 500 Volts Surge	56	EKMH451VSN560MP25T	22 × 25	P25	4.44	0.4
	68	EKMH451VSN680MP30T	22 × 30	P30	3.656	0.5
	82	EKMH451VSN820MP35T	22 × 35	P35	3.032	0.56
	100	EKMH451VSN101MP40T	22 × 40	P40	2.486	0.64
	120	EKMH451VSN121MP45T	22 × 45	P45	2.072	0.72
	150	EKMH451VSN151MP50T	22 × 50	P50	1.658	0.79
	68	EKMH451VSN680MQ25T	25.4 × 25	Q25	3.656	0.5
	82	EKMH451VSN820MQ25T	25.4 × 25	Q25	3.032	0.55
	100	EKMH451VSN101MQ30T	25.4 × 30	Q30	2.486	0.57
	120	EKMH451VSN121MQ35T	25.4 × 35	Q35	2.072	0.71
	150	EKMH451VSN151MQ40T	25.4 × 40	Q40	1.658	0.75
	180	EKMH451VSN181MQ45T	25.4 × 45	Q45	1.381	0.84
	220	EKMH451VSN221MQ50T	25.4 × 50	Q50	1.13	0.98
	100	EKMH451VSN101MR25T	30 × 25	R25	2.486	0.64
	120	EKMH451VSN121MR25T	30 × 25	R25	2.072	0.7
	150	EKMH451VSN151MR30T	30 × 30	R30	1.658	0.74
	180	EKMH451VSN181MR35T	30 × 35	R35	1.381	0.87
	220	EKMH451VSN221MR40T	30 × 40	R40	1.13	0.98
	270	EKMH451VSN271MR45T	30 × 45	R45	0.921	1.15
	330	EKMH451VSN331MR50T	30 × 50	R50	0.753	1.38
	150	EKMH451VSN151MA25T	35 × 25	A25	1.658	0.75
	180	EKMH451VSN181MA30T	35 × 30	A30	1.381	0.9
	220	EKMH451VSN221MA30T	35 × 30	A30	1.13	1.0
	270	EKMH451VSN271MA35T	35 × 35	A35	0.921	1.17
	330	EKMH451VSN331MA40T	35 × 40	A40	0.753	1.38
	390	EKMH451VSN391MA45T	35 × 45	A45	0.638	1.55
	470	EKMH451VSN471MA50T	35 × 50	A50	0.529	1.72
	560	EKMH451VND561MA63T	35 × 63	A63	0.444	2.11
	820	EKMH451VND821MA80T	35 × 80	A80	0.303	2.73
	220	EKMH451VND221MB25T	40 × 25	B25	1.13	1.09
	270	EKMH451VND271MB30T	40 × 30	B30	0.921	1.26
	390	EKMH451VND391MB35T	40 × 35	B35	0.638	1.57
	470	EKMH451VND471MB40T	40 × 40	B40	0.529	1.78
	560	EKMH451VND561MB50T	40 × 50	B50	0.444	2.06
820	EKMH451VND821MB63T	40 × 63	B63	0.303	2.66	
1,200	EKMH451VND122MB80T	40 × 80	B80	0.207	3.5	

† For construction and terminal options, refer to the part numbering system for descriptions and codes.

\* Refer to diagram of dimensions for detailed case size specifications.