

- **Snap Mount**
- **Downsize**
- **Large Capacitance**
- **RoHS Compliant**
- **+105°C Maximum Temperature**



The KMQ series is a snap-in capacitor series that offers downsized versions of the current miniaturized KMM series. These capacitors have a rated lifetime of 2,000 hours at +105°C with the rated ripple current applied. With high ripple current capability and higher CV per case size than the KMM series, the KMQ capacitors are suitable for many downsized power supply circuits. The standard KMQ capacitors have a 2-pin snap-in terminal style. The KMQ series is RoHS compliant offering Pb-free construction and PET (polyester) sleeves with no end disk as the standard.

The standard KMQ series capacitors are *not* solvent proof. Refer to guidelines and precautions on the website for usage and installation conditions recommended for United Chemi-Con products.

Summary of Specifications

- **PC board 2-pin snap-in terminals.**
- **Capacitance range: 68 to 33,000µF.**
- **Voltage range: 35, 50, 160 to 450VDC.**
- **Category temperature range: -40°C to +105°C for 35V and 50V; -25°C to +105°C for 160 to 450V.**
- **Leakage current: $3\sqrt{CV}$ (µA) maximum after 5 minutes at +20°C.**
- **Standard capacitance tolerance: ±20%**
- **Nominal case size (D × L): 22 × 25mm to 35 × 50mm.**
- **Rated lifetime: 2,000 hours at +105°C with the rated ripple current applied.**

KMQ Specifications - Snap Mount

| Item | Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|--|-------------------|---------|----------|---------|----------|-----------------------|---------|----------|------------------|---------|-----------------------|---------|---------|------|----------|------|-----------------|------|------|------|------|----------|------|------|------|------|------|------|
| Category Temperature Range | - 40 to +105°C for 35 and 50VDC; - 25 to +105°C for 160 to 450VDC | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rated Voltage Range | 35, 50, 160 to 450VDC | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Range | 68 to 33,000μF | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ± 20% (M) at +20°C, 120Hz | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current | $I \leq 3\sqrt{CV}$ (μA) after 5 minutes at +20°C. Where I = Max. leakage current (μA), C = Nominal capacitance (μF) and V = Rated voltage (V) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor (Tan δ) | At +20°C, 120Hz <table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th colspan="2">35</th> <th colspan="2">50</th> <th>160-250</th> <th>315-400</th> <th>420, 450</th> </tr> </thead> <tbody> <tr> <td>Capacitance (μF)</td> <td><10,000</td> <td>≥10,000</td> <td><10,000</td> <td>≥10,000</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Tan δ (DF) Max.</td> <td>0.30</td> <td>0.35</td> <td>0.25</td> <td>0.30</td> <td>0.15</td> <td>0.15</td> <td>0.20</td> </tr> </tbody> </table> | Rated Voltage (V) | 35 | | 50 | | 160-250 | 315-400 | 420, 450 | Capacitance (μF) | <10,000 | ≥10,000 | <10,000 | ≥10,000 | — | — | — | Tan δ (DF) Max. | 0.30 | 0.35 | 0.25 | 0.30 | 0.15 | 0.15 | 0.20 | | | | |
| Rated Voltage (V) | 35 | | 50 | | 160-250 | 315-400 | 420, 450 | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance (μF) | <10,000 | ≥10,000 | <10,000 | ≥10,000 | — | — | — | | | | | | | | | | | | | | | | | | | | | | |
| Tan δ (DF) Max. | 0.30 | 0.35 | 0.25 | 0.30 | 0.15 | 0.15 | 0.20 | | | | | | | | | | | | | | | | | | | | | | |
| 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>35, 50</th> <th>160-250</th> <th>315-400</th> <th>420, 450</th> </tr> </thead> <tbody> <tr> <td>Z (-25°C) / Z (+20°C)</td> <td>10</td> <td>4</td> <td>8</td> <td>8</td> </tr> <tr> <td>Z (-40°C) / Z (+20°C)</td> <td>4</td> <td>—</td> <td>—</td> <td>—</td> </tr> </tbody> </table> | Rated Voltage (V) | 35, 50 | 160-250 | 315-400 | 420, 450 | Z (-25°C) / Z (+20°C) | 10 | 4 | 8 | 8 | Z (-40°C) / Z (+20°C) | 4 | — | — | — | | | | | | | | | | | | | |
| Rated Voltage (V) | 35, 50 | 160-250 | 315-400 | 420, 450 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z (-25°C) / Z (+20°C) | 10 | 4 | 8 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z (-40°C) / Z (+20°C) | 4 | — | — | — | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rated Ripple Current Multipliers | 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>50kHz</th> </tr> </thead> <tbody> <tr> <td>35V, 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>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> | DC Rated Voltage | 50Hz | 120Hz | 300Hz | 1kHz | 10kHz | 50kHz | 35V, 50V | 0.95 | 1.00 | 1.03 | 1.05 | 1.08 | 1.08 | 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 |
| DC Rated Voltage | 50Hz | 120Hz | 300Hz | 1kHz | 10kHz | 50kHz | | | | | | | | | | | | | | | | | | | | | | | |
| 35V, 50V | 0.95 | 1.00 | 1.03 | 1.05 | 1.08 | 1.08 | | | | | | | | | | | | | | | | | | | | | | | |
| 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: ≤ ± 20% of initial measured value Tan δ (DF) : ≤ 200% of initial specified value Leakage current : ≤ 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: ≤ ± 15% of initial measured value Tan δ (DF) : ≤ 150% of initial specified value Leakage current : ≤ initial specified value | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Diagram of Dimensions - Snap Mount

Snap Mount

Type VSN Ø22~Ø35

PET Sleeve
See Pin Detail
PC board pin-out
Ø10
Ø2-2x

Unit: mm

VS Pin Dimensions

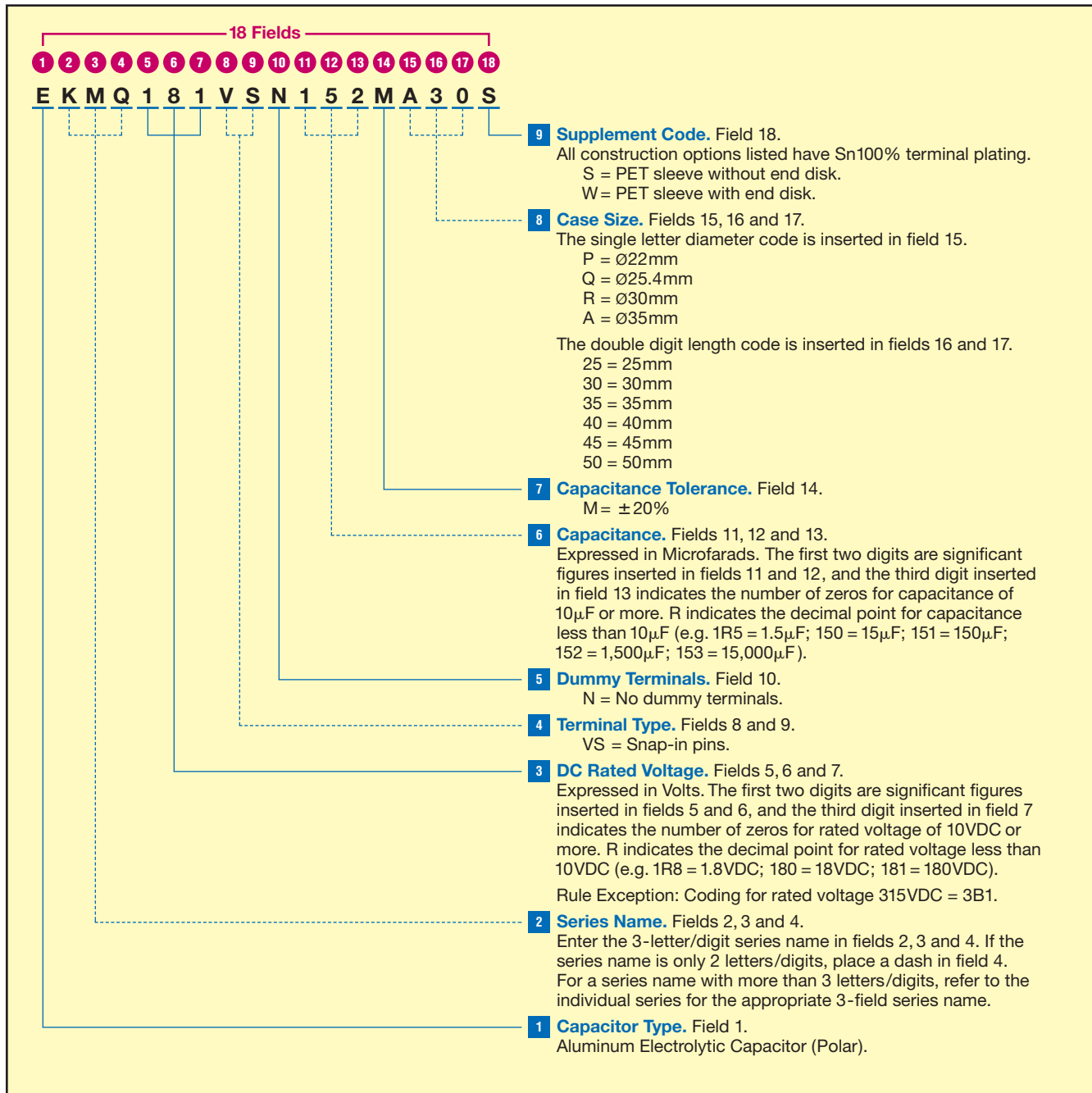
Standard design does not have a plastic end disk.

*Vent may be located either on the bottom or side of the can.

| Type | P | W | W ₁ | W ₂ |
|------|---------|---------|----------------|----------------|
| VSN | 4.0±0.5 | 1.5±0.2 | 1.0 | 1.0 |

Part Numbering System for KMQ Series

When ordering, always specify complete 18-field global part number.



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 |
|-------------------------------------|-----------------------------------|--------------------|-------------------------------|----------------|---------------------------------|---|
| 35 Volts 44 Volts Surge | 4,700 | EKMQ350VSN472MP25S | 22 × 25 | P25 | 0.106 | 1.87 |
| | 5,600 | EKMQ350VSN562MP25S | 22 × 25 | P25 | 0.089 | 2.04 |
| | 6,800 | EKMQ350VSN682MP30S | 22 × 30 | P30 | 0.073 | 2.36 |
| | 8,200 | EKMQ350VSN822MP35S | 22 × 35 | P35 | 0.061 | 2.65 |
| | 10,000 | EKMQ350VSN103MP40S | 22 × 40 | P40 | 0.058 | 3.0 |
| | 12,000 | EKMQ350VSN123MP50S | 22 × 50 | P50 | 0.048 | 3.47 |
| | 5,600 | EKMQ350VSN562MQ25S | 25.4 × 25 | Q25 | 0.089 | 2.0 |
| | 6,800 | EKMQ350VSN682MQ25S | 25.4 × 25 | Q25 | 0.073 | 2.21 |
| | 8,200 | EKMQ350VSN822MQ30S | 25.4 × 30 | Q30 | 0.061 | 2.49 |
| | 10,000 | EKMQ350VSN103MQ35S | 25.4 × 35 | Q35 | 0.058 | 2.88 |
| | 12,000 | EKMQ350VSN123MQ35S | 25.4 × 35 | Q35 | 0.048 | 3.15 |
| | 15,000 | EKMQ350VSN153MQ40S | 25.4 × 40 | Q40 | 0.039 | 3.61 |
| | 18,000 | EKMQ350VSN183MQ50S | 25.4 × 50 | Q50 | 0.032 | 4.14 |
| | 8,200 | EKMQ350VSN822MR25S | 30 × 25 | R25 | 0.061 | 2.62 |
| | 10,000 | EKMQ350VSN103MR25S | 30 × 25 | R25 | 0.058 | 2.9 |
| | 12,000 | EKMQ350VSN123MR30S | 30 × 30 | R30 | 0.048 | 3.25 |
| | 15,000 | EKMQ350VSN153MR35S | 30 × 35 | R35 | 0.039 | 3.78 |
| | 18,000 | EKMQ350VSN183MR40S | 30 × 40 | R40 | 0.032 | 4.3 |
| | 22,000 | EKMQ350VSN223MR50S | 30 × 50 | R50 | 0.026 | 5.0 |
| | 12,000 | EKMQ350VSN123MA25S | 35 × 25 | A25 | 0.048 | 3.2 |
| | 15,000 | EKMQ350VSN153MA25S | 35 × 25 | A25 | 0.039 | 3.6 |
| | 18,000 | EKMQ350VSN183MA30S | 35 × 30 | A30 | 0.032 | 4.1 |
| | 22,000 | EKMQ350VSN223MA35S | 35 × 35 | A35 | 0.026 | 4.64 |
| | 27,000 | EKMQ350VSN273MA40S | 35 × 40 | A40 | 0.021 | 5.37 |
| | 33,000 | EKMQ350VSN333MA50S | 35 × 50 | A50 | 0.018 | 6.0 |
| | 50 Volts 63 Volts Surge | 2,700 | EKMQ500VSN272MP25S | 22 × 25 | P25 | 0.153 |
| 3,300 | | EKMQ500VSN332MP30S | 22 × 30 | P30 | 0.126 | 1.92 |
| 3,900 | | EKMQ500VSN392MP30S | 22 × 30 | P30 | 0.106 | 2.08 |
| 4,700 | | EKMQ500VSN472MP35S | 22 × 35 | P35 | 0.089 | 2.43 |
| 5,600 | | EKMQ500VSN562MP40S | 22 × 40 | P40 | 0.074 | 2.63 |
| 6,800 | | EKMQ500VSN682MP50S | 22 × 50 | P50 | 0.061 | 3.05 |
| 3,300 | | EKMQ500VSN332MQ25S | 25.4 × 25 | Q25 | 0.126 | 1.76 |
| 3,900 | | EKMQ500VSN392MQ25S | 25.4 × 25 | Q25 | 0.106 | 2.04 |
| 4,700 | | EKMQ500VSN472MQ30S | 25.4 × 30 | Q30 | 0.089 | 2.5 |
| 5,600 | | EKMQ500VSN562MQ35S | 25.4 × 35 | Q35 | 0.074 | 2.61 |
| 6,800 | | EKMQ500VSN682MQ40S | 25.4 × 40 | Q40 | 0.061 | 2.94 |
| 8,200 | | EKMQ500VSN822MQ45S | 25.4 × 45 | Q45 | 0.051 | 3.6 |
| 10,000 | | EKMQ500VSN103MQ50S | 25.4 × 50 | Q50 | 0.050 | 4.0 |
| 4,700 | | EKMQ500VSN472MR25S | 30 × 25 | R25 | 0.089 | 2.29 |
| 5,600 | | EKMQ500VSN562MR25S | 30 × 25 | R25 | 0.074 | 2.8 |
| 6,800 | | EKMQ500VSN682MR30S | 30 × 30 | R30 | 0.061 | 3.3 |
| 8,200 | | EKMQ500VSN822MR35S | 30 × 35 | R35 | 0.051 | 3.6 |
| 10,000 | | EKMQ500VSN103MR40S | 30 × 40 | R40 | 0.050 | 4.0 |
| 12,000 | | EKMQ500VSN123MR50S | 30 × 50 | R50 | 0.041 | 4.29 |
| 6,800 | | EKMQ500VSN682MA25S | 35 × 25 | A25 | 0.061 | 2.77 |
| 8,200 | | EKMQ500VSN822MA30S | 35 × 30 | A30 | 0.051 | 3.6 |
| 10,000 | | EKMQ500VSN103MA30S | 35 × 30 | A30 | 0.050 | 4.0 |
| 12,000 | | EKMQ500VSN123MA35S | 35 × 35 | A35 | 0.041 | 4.37 |
| 15,000 | | EKMQ500VSN153MA40S | 35 × 40 | A40 | 0.033 | 4.5 |
| 18,000 | | EKMQ500VSN183MA50S | 35 × 50 | A50 | 0.028 | 5.3 |
| 160 Volts 200 Volts Surge | | 470 | EKMQ161VSN471MP25S | 22 × 25 | P25 | 0.529 |
| | 560 | EKMQ161VSN561MP30S | 22 × 30 | P30 | 0.444 | 1.5 |
| | 680 | EKMQ161VSN681MP30S | 22 × 30 | P30 | 0.366 | 1.7 |
| | 820 | EKMQ161VSN821MP35S | 22 × 35 | P35 | 0.303 | 2.0 |
| | 1,000 | EKMQ161VSN102MP40S | 22 × 40 | P40 | 0.249 | 2.2 |
| | 680 | EKMQ161VSN681MQ25S | 25.4 × 25 | Q25 | 0.366 | 1.7 |
| | 820 | EKMQ161VSN821MQ30S | 25.4 × 30 | Q30 | 0.303 | 2.0 |

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

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

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 |
|-------------------------------------|--------------------|--------------------|-------------------------------|----------------|---------------------------------|---|
| 160 Volts 200 Volts Surge | 1,000 | EKMQ161VSN102MQ35S | 25.4 × 35 | Q35 | 0.249 | 2.2 |
| | 1,200 | EKMQ161VSN122MQ40S | 25.4 × 40 | Q40 | 0.207 | 2.3 |
| | 1,500 | EKMQ161VSN152MQ45S | 25.4 × 45 | Q45 | 0.166 | 2.5 |
| | 1,800 | EKMQ161VSN182MQ50S | 25.4 × 50 | Q50 | 0.138 | 2.7 |
| | 820 | EKMQ161VSN821MR25S | 30 × 25 | R25 | 0.303 | 2.0 |
| | 1,000 | EKMQ161VSN102MR25S | 30 × 25 | R25 | 0.249 | 2.2 |
| | 1,200 | EKMQ161VSN122MR30S | 30 × 30 | R30 | 0.207 | 2.3 |
| | 1,500 | EKMQ161VSN152MR35S | 30 × 35 | R35 | 0.166 | 2.5 |
| | 1,800 | EKMQ161VSN182MR40S | 30 × 40 | R40 | 0.138 | 2.7 |
| | 2,200 | EKMQ161VSN222MR45S | 30 × 45 | R45 | 0.113 | 2.9 |
| | 2,700 | EKMQ161VSN272MR50S | 30 × 50 | R50 | 0.092 | 3.1 |
| | 1,200 | EKMQ161VSN122MA25S | 35 × 25 | A25 | 0.207 | 2.3 |
| | 1,500 | EKMQ161VSN152MA30S | 35 × 30 | A30 | 0.166 | 2.5 |
| | 1,800 | EKMQ161VSN182MA30S | 35 × 30 | A30 | 0.138 | 2.7 |
| | 2,200 | EKMQ161VSN222MA35S | 35 × 35 | A35 | 0.113 | 2.9 |
| 2,700 | EKMQ161VSN272MA40S | 35 × 40 | A40 | 0.092 | 3.1 | |
| 3,300 | EKMQ161VSN332MA50S | 35 × 50 | A50 | 0.075 | 3.3 | |
| 180 Volts 225 Volts Surge | 390 | EKMQ181VSN391MP25S | 22 × 25 | P25 | 0.638 | 1.3 |
| | 470 | EKMQ181VSN471MP30S | 22 × 30 | P30 | 0.529 | 1.4 |
| | 560 | EKMQ181VSN561MP30S | 22 × 30 | P30 | 0.444 | 1.5 |
| | 680 | EKMQ181VSN681MP35S | 22 × 35 | P35 | 0.366 | 1.7 |
| | 820 | EKMQ181VSN821MP40S | 22 × 40 | P40 | 0.303 | 2.0 |
| | 1,000 | EKMQ181VSN102MP45S | 22 × 45 | P45 | 0.249 | 2.2 |
| | 560 | EKMQ181VSN561MQ25S | 25.4 × 25 | Q25 | 0.444 | 1.5 |
| | 680 | EKMQ181VSN681MQ30S | 25.4 × 30 | Q30 | 0.366 | 1.7 |
| | 820 | EKMQ181VSN821MQ30S | 25.4 × 30 | Q30 | 0.303 | 2.0 |
| | 1,000 | EKMQ181VSN102MQ40S | 25.4 × 40 | Q40 | 0.249 | 2.2 |
| | 1,200 | EKMQ181VSN122MQ45S | 25.4 × 45 | Q45 | 0.207 | 2.3 |
| | 1,500 | EKMQ181VSN152MQ50S | 25.4 × 50 | Q50 | 0.166 | 2.5 |
| | 820 | EKMQ181VSN821MR25S | 30 × 25 | R25 | 0.303 | 2.0 |
| | 1,000 | EKMQ181VSN102MR30S | 30 × 30 | R30 | 0.249 | 2.2 |
| | 1,200 | EKMQ181VSN122MR35S | 30 × 35 | R35 | 0.207 | 2.3 |
| | 1,500 | EKMQ181VSN152MR40S | 30 × 40 | R40 | 0.166 | 2.5 |
| | 1,800 | EKMQ181VSN182MR45S | 30 × 45 | R45 | 0.138 | 2.7 |
| | 2,200 | EKMQ181VSN222MR50S | 30 × 50 | R50 | 0.113 | 2.9 |
| | 1,000 | EKMQ181VSN102MA25S | 35 × 25 | A25 | 0.249 | 2.2 |
| | 1,200 | EKMQ181VSN122MA30S | 35 × 30 | A30 | 0.207 | 2.3 |
| 1,500 | EKMQ181VSN152MA30S | 35 × 30 | A30 | 0.166 | 2.5 | |
| 1,800 | EKMQ181VSN182MA35S | 35 × 35 | A35 | 0.138 | 2.7 | |
| 2,200 | EKMQ181VSN222MA40S | 35 × 40 | A40 | 0.113 | 2.9 | |
| 2,700 | EKMQ181VSN272MA50S | 35 × 50 | A50 | 0.092 | 3.1 | |
| 200 Volts 250 Volts Surge | 390 | EKMQ201VSN391MP25S | 22 × 25 | P25 | 0.638 | 1.31 |
| | 470 | EKMQ201VSN471MP30S | 22 × 30 | P30 | 0.529 | 1.45 |
| | 560 | EKMQ201VSN561MP30S | 22 × 30 | P30 | 0.444 | 1.67 |
| | 680 | EKMQ201VSN681MP40S | 22 × 40 | P40 | 0.366 | 1.75 |
| | 820 | EKMQ201VSN821MP45S | 22 × 45 | P45 | 0.303 | 2.04 |
| | 1,000 | EKMQ201VSN102MP50S | 22 × 50 | P50 | 0.249 | 2.3 |
| | 560 | EKMQ201VSN561MQ25S | 25.4 × 25 | Q25 | 0.444 | 1.67 |
| | 680 | EKMQ201VSN681MQ30S | 25.4 × 30 | Q30 | 0.366 | 1.75 |
| | 820 | EKMQ201VSN821MQ35S | 25.4 × 35 | Q35 | 0.303 | 2.04 |
| | 1,000 | EKMQ201VSN102MQ45S | 25.4 × 45 | Q45 | 0.249 | 2.3 |
| | 1,200 | EKMQ201VSN122MQ50S | 25.4 × 50 | Q50 | 0.207 | 2.65 |
| | 820 | EKMQ201VSN821MR25S | 30 × 25 | R25 | 0.303 | 2.04 |
| | 1,000 | EKMQ201VSN102MR30S | 30 × 30 | R30 | 0.249 | 2.3 |
| | 1,200 | EKMQ201VSN122MR35S | 30 × 35 | R35 | 0.207 | 2.65 |

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

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

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 |
|------------------------------|--------------------|--------------------|-------------------------------|----------------|---------------------------------|---|
| 200 Volts 250 Volts Surge | 1,500 | EKMQ201VSN152MR40S | 30 × 40 | R40 | 0.166 | 2.8 |
| | 1,800 | EKMQ201VSN182MR45S | 30 × 45 | R45 | 0.138 | 3.08 |
| | 1,000 | EKMQ201VSN102MA25S | 35 × 25 | A25 | 0.249 | 2.3 |
| | 1,200 | EKMQ201VSN122MA30S | 35 × 30 | A30 | 0.207 | 2.65 |
| | 1,500 | EKMQ201VSN152MA30S | 35 × 30 | A30 | 0.166 | 2.8 |
| | 1,800 | EKMQ201VSN182MA40S | 35 × 40 | A40 | 0.138 | 3.08 |
| | 2,200 | EKMQ201VSN222MA45S | 35 × 45 | A45 | 0.113 | 3.48 |
| 250 Volts 300 Volts Surge | 220 | EKMQ251VSN221MP25S | 22 × 25 | P25 | 1.13 | 1.0 |
| | 270 | EKMQ251VSN271MP25S | 22 × 25 | P25 | 0.921 | 1.1 |
| | 330 | EKMQ251VSN331MP30S | 22 × 30 | P30 | 0.754 | 1.2 |
| | 390 | EKMQ251VSN391MP35S | 22 × 35 | P35 | 0.638 | 1.3 |
| | 470 | EKMQ251VSN471MP40S | 22 × 40 | P40 | 0.529 | 1.4 |
| | 560 | EKMQ251VSN561MP45S | 22 × 45 | P45 | 0.444 | 1.5 |
| | 680 | EKMQ251VSN681MP50S | 22 × 50 | P50 | 0.366 | 1.7 |
| | 330 | EKMQ251VSN331MQ25S | 25.4 × 25 | Q25 | 0.754 | 1.2 |
| | 390 | EKMQ251VSN391MQ25S | 25.4 × 25 | Q25 | 0.638 | 1.3 |
| | 470 | EKMQ251VSN471MQ30S | 25.4 × 30 | Q30 | 0.529 | 1.4 |
| | 560 | EKMQ251VSN561MQ35S | 25.4 × 35 | Q35 | 0.444 | 1.5 |
| | 680 | EKMQ251VSN681MQ40S | 25.4 × 40 | Q40 | 0.366 | 1.7 |
| | 820 | EKMQ251VSN821MQ45S | 25.4 × 45 | Q45 | 0.303 | 2.0 |
| | 470 | EKMQ251VSN471MR25S | 30 × 25 | R25 | 0.529 | 1.4 |
| | 560 | EKMQ251VSN561MR25S | 30 × 25 | R25 | 0.444 | 1.5 |
| | 680 | EKMQ251VSN681MR30S | 30 × 30 | R30 | 0.366 | 1.7 |
| | 820 | EKMQ251VSN821MR35S | 30 × 35 | R35 | 0.303 | 2.0 |
| | 1,000 | EKMQ251VSN102MR40S | 30 × 40 | R40 | 0.249 | 2.2 |
| | 1,200 | EKMQ251VSN122MR45S | 30 × 45 | R45 | 0.207 | 2.3 |
| | 680 | EKMQ251VSN681MA25S | 35 × 25 | A25 | 0.366 | 1.7 |
| | 820 | EKMQ251VSN821MA30S | 35 × 30 | A30 | 0.303 | 2.0 |
| 1,000 | EKMQ251VSN102MA30S | 35 × 30 | A30 | 0.249 | 2.2 | |
| 1,200 | EKMQ251VSN122MA35S | 35 × 35 | A35 | 0.207 | 2.3 | |
| 1,500 | EKMQ251VSN152MA45S | 35 × 45 | A45 | 0.166 | 2.5 | |
| 1,800 | EKMQ251VSN182MA50S | 35 × 50 | A50 | 0.138 | 2.7 | |
| 315 Volts 365 Volts Surge | 150 | EKMQ3B1VSN151MP25S | 22 × 25 | P25 | 1.658 | 0.82 |
| | 180 | EKMQ3B1VSN181MP30S | 22 × 30 | P30 | 1.382 | 0.9 |
| | 220 | EKMQ3B1VSN221MP30S | 22 × 30 | P30 | 1.13 | 1.0 |
| | 270 | EKMQ3B1VSN271MP35S | 22 × 35 | P35 | 0.921 | 1.1 |
| | 330 | EKMQ3B1VSN331MP45S | 22 × 45 | P45 | 0.754 | 1.2 |
| | 390 | EKMQ3B1VSN391MP45S | 22 × 45 | P45 | 0.638 | 1.3 |
| | 220 | EKMQ3B1VSN221MQ25S | 25.4 × 25 | Q25 | 1.13 | 1.0 |
| | 270 | EKMQ3B1VSN271MQ30S | 25.4 × 30 | Q30 | 0.921 | 1.1 |
| | 330 | EKMQ3B1VSN331MQ35S | 25.4 × 35 | Q35 | 0.754 | 1.2 |
| | 390 | EKMQ3B1VSN391MQ40S | 25.4 × 40 | Q40 | 0.638 | 1.3 |
| | 470 | EKMQ3B1VSN471MQ45S | 25.4 × 45 | Q45 | 0.529 | 1.4 |
| | 560 | EKMQ3B1VSN561MQ50S | 25.4 × 50 | Q50 | 0.444 | 1.5 |
| | 330 | EKMQ3B1VSN331MR25S | 30 × 25 | R25 | 0.754 | 1.2 |
| | 390 | EKMQ3B1VSN391MR30S | 30 × 30 | R30 | 0.638 | 1.3 |
| | 470 | EKMQ3B1VSN471MR35S | 30 × 35 | R35 | 0.529 | 1.4 |
| | 560 | EKMQ3B1VSN561MR40S | 30 × 40 | R40 | 0.444 | 1.5 |
| | 680 | EKMQ3B1VSN681MR45S | 30 × 45 | R45 | 0.366 | 1.7 |
| | 820 | EKMQ3B1VSN821MR50S | 30 × 50 | R50 | 0.303 | 2.0 |
| | 390 | EKMQ3B1VSN391MA25S | 35 × 25 | A25 | 0.638 | 1.3 |
| | 470 | EKMQ3B1VSN471MA25S | 35 × 25 | A25 | 0.529 | 1.4 |
| | 560 | EKMQ3B1VSN561MA30S | 35 × 30 | A30 | 0.444 | 1.5 |
| 680 | EKMQ3B1VSN681MA35S | 35 × 35 | A35 | 0.366 | 1.7 | |
| 820 | EKMQ3B1VSN821MA40S | 35 × 40 | A40 | 0.303 | 2.0 | |
| 1,000 | EKMQ3B1VSN102MA45S | 35 × 45 | A45 | 0.249 | 2.3 | |

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

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

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 |
|-------------------------------------|--------------------|--------------------|-------------------------------|----------------|---------------------------------|---|
| 350 Volts 400 Volts Surge | 120 | EKMQ351VSN121MP25S | 22 × 25 | P25 | 2.072 | 0.75 |
| | 150 | EKMQ351VSN151MP30S | 22 × 30 | P30 | 1.658 | 0.82 |
| | 180 | EKMQ351VSN181MP30S | 22 × 30 | P30 | 1.382 | 0.9 |
| | 220 | EKMQ351VSN221MP35S | 22 × 35 | P35 | 1.13 | 1.0 |
| | 270 | EKMQ351VSN271MP40S | 22 × 40 | P40 | 0.921 | 1.1 |
| | 330 | EKMQ351VSN331MP45S | 22 × 45 | P45 | 0.754 | 1.2 |
| | 180 | EKMQ351VSN181MQ25S | 25.4 × 25 | Q25 | 1.382 | 0.9 |
| | 220 | EKMQ351VSN221MQ30S | 25.4 × 30 | Q30 | 1.13 | 1.0 |
| | 270 | EKMQ351VSN271MQ30S | 25.4 × 30 | Q30 | 0.921 | 1.1 |
| | 330 | EKMQ351VSN331MQ40S | 25.4 × 40 | Q40 | 0.754 | 1.2 |
| | 390 | EKMQ351VSN391MQ45S | 25.4 × 45 | Q45 | 0.638 | 1.3 |
| | 470 | EKMQ351VSN471MQ50S | 25.4 × 50 | Q50 | 0.529 | 1.4 |
| | 270 | EKMQ351VSN271MR25S | 30 × 25 | R25 | 0.921 | 1.1 |
| | 330 | EKMQ351VSN331MR30S | 30 × 30 | R30 | 0.754 | 1.2 |
| | 390 | EKMQ351VSN391MR35S | 30 × 35 | R35 | 0.638 | 1.3 |
| | 470 | EKMQ351VSN471MR35S | 30 × 35 | R35 | 0.529 | 1.4 |
| | 560 | EKMQ351VSN561MR45S | 30 × 45 | R45 | 0.444 | 1.5 |
| | 680 | EKMQ351VSN681MR50S | 30 × 50 | R50 | 0.366 | 1.7 |
| | 470 | EKMQ351VSN471MA30S | 35 × 30 | A30 | 0.529 | 1.4 |
| | 560 | EKMQ351VSN561MA35S | 35 × 35 | A35 | 0.444 | 1.5 |
| 680 | EKMQ351VSN681MA40S | 35 × 40 | A40 | 0.366 | 1.7 | |
| 820 | EKMQ351VSN821MA45S | 35 × 45 | A45 | 0.303 | 1.9 | |
| 400 Volts 450 Volts Surge | 100 | EKMQ401VSN101MP25S | 22 × 25 | P25 | 2.487 | 0.7 |
| | 120 | EKMQ401VSN121MP30S | 22 × 30 | P30 | 2.072 | 0.75 |
| | 150 | EKMQ401VSN151MP30S | 22 × 30 | P30 | 1.658 | 0.88 |
| | 180 | EKMQ401VSN181MP35S | 22 × 35 | P35 | 1.382 | 0.95 |
| | 220 | EKMQ401VSN221MP45S | 22 × 45 | P45 | 1.13 | 1.1 |
| | 270 | EKMQ401VSN271MP50S | 22 × 50 | P50 | 0.921 | 1.22 |
| | 150 | EKMQ401VSN151MQ25S | 25.4 × 25 | Q25 | 1.658 | 0.88 |
| | 180 | EKMQ401VSN181MQ30S | 25.4 × 30 | Q30 | 1.382 | 0.95 |
| | 220 | EKMQ401VSN221MQ35S | 25.4 × 35 | Q35 | 1.13 | 1.1 |
| | 270 | EKMQ401VSN271MQ40S | 25.4 × 40 | Q40 | 0.921 | 1.22 |
| | 330 | EKMQ401VSN331MQ45S | 25.4 × 45 | Q45 | 0.754 | 1.44 |
| | 390 | EKMQ401VSN391MQ50S | 25.4 × 50 | Q50 | 0.638 | 1.55 |
| | 220 | EKMQ401VSN221MR25S | 30 × 25 | R25 | 1.13 | 1.1 |
| | 270 | EKMQ401VSN271MR30S | 30 × 30 | R30 | 0.921 | 1.22 |
| | 330 | EKMQ401VSN331MR35S | 30 × 35 | R35 | 0.754 | 1.44 |
| | 390 | EKMQ401VSN391MR40S | 30 × 40 | R40 | 0.638 | 1.55 |
| | 470 | EKMQ401VSN471MR45S | 30 × 45 | R45 | 0.529 | 1.68 |
| | 560 | EKMQ401VSN561MR50S | 30 × 50 | R50 | 0.444 | 1.9 |
| | 270 | EKMQ401VSN271MA25S | 35 × 25 | A25 | 0.921 | 1.22 |
| | 330 | EKMQ401VSN331MA30S | 35 × 30 | A30 | 0.754 | 1.44 |
| 390 | EKMQ401VSN391MA30S | 35 × 30 | A30 | 0.638 | 1.55 | |
| 470 | EKMQ401VSN471MA35S | 35 × 35 | A35 | 0.529 | 1.68 | |
| 560 | EKMQ401VSN561MA40S | 35 × 40 | A40 | 0.444 | 1.9 | |
| 680 | EKMQ401VSN681MA45S | 35 × 45 | A45 | 0.366 | 2.12 | |
| 420 Volts 470 Volts Surge | 82 | EKMQ421VSN820MP25S | 22 × 25 | P25 | 4.043 | 0.64 |
| | 100 | EKMQ421VSN101MP25S | 22 × 25 | P25 | 3.315 | 0.66 |
| | 120 | EKMQ421VSN121MP30S | 22 × 30 | P30 | 2.763 | 0.81 |
| | 150 | EKMQ421VSN151MP35S | 22 × 35 | P35 | 2.21 | 0.84 |
| | 180 | EKMQ421VSN181MP40S | 22 × 40 | P40 | 1.842 | 0.91 |
| | 220 | EKMQ421VSN221MP45S | 22 × 45 | P45 | 1.507 | 1.05 |
| | 100 | EKMQ421VSN101MQ25S | 25.4 × 25 | Q25 | 4.043 | 0.66 |
| | 120 | EKMQ421VSN121MQ25S | 25.4 × 25 | Q25 | 2.763 | 0.81 |
| | 150 | EKMQ421VSN151MQ30S | 25.4 × 30 | Q30 | 2.21 | 0.84 |
| | 180 | EKMQ421VSN181MQ30S | 25.4 × 30 | Q30 | 1.842 | 0.91 |
| 220 | EKMQ421VSN221MQ35S | 25.4 × 35 | Q35 | 1.507 | 1.05 | |

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

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

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 |
|--------------------------------------|--------------------|--------------------|-------------------------------|----------------|---------------------------------|---|
| 420 Volts 470 Volts Surge | 270 | EKMQ421VSN271MQ40S | 25.4 × 40 | Q40 | 1.228 | 1.25 |
| | 330 | EKMQ421VSN331MQ50S | 25.4 × 50 | Q50 | 1.005 | 1.42 |
| | 150 | EKMQ421VSN151MR25S | 30 × 25 | R25 | 2.21 | 0.84 |
| | 180 | EKMQ421VSN181MR25S | 30 × 25 | R25 | 1.842 | 0.91 |
| | 220 | EKMQ421VSN221MR30S | 30 × 30 | R30 | 1.507 | 1.05 |
| | 270 | EKMQ421VSN271MR30S | 30 × 30 | R30 | 1.228 | 1.25 |
| | 330 | EKMQ421VSN331MR35S | 30 × 35 | R35 | 1.005 | 1.42 |
| | 390 | EKMQ421VSN391MR40S | 30 × 40 | R40 | 0.85 | 1.61 |
| | 470 | EKMQ421VSN471MR45S | 30 × 45 | R45 | 0.705 | 1.86 |
| | 220 | EKMQ421VSN221MA25S | 35 × 25 | A25 | 1.507 | 1.05 |
| | 270 | EKMQ421VSN271MA25S | 35 × 25 | A25 | 1.228 | 1.25 |
| | 330 | EKMQ421VSN331MA30S | 35 × 30 | A30 | 1.005 | 1.42 |
| | 390 | EKMQ421VSN391MA35S | 35 × 35 | A35 | 0.85 | 1.61 |
| | 470 | EKMQ421VSN471MA40S | 35 × 40 | A40 | 0.705 | 1.86 |
| | 560 | EKMQ421VSN561MA45S | 35 × 45 | A45 | 0.592 | 2.1 |
| | 680 | EKMQ421VSN681MA50S | 35 × 50 | A50 | 0.488 | 2.2 |
| 450 Volts 500 Volts Surge | 68 | EKMQ451VSN680MP25S | 22 × 25 | P25 | 4.876 | 0.5 |
| | 82 | EKMQ451VSN820MP30S | 22 × 30 | P30 | 4.043 | 0.56 |
| | 100 | EKMQ451VSN101MP30S | 22 × 30 | P30 | 3.315 | 0.64 |
| | 120 | EKMQ451VSN121MP35S | 22 × 35 | P35 | 2.763 | 0.72 |
| | 150 | EKMQ451VSN151MP40S | 22 × 40 | P40 | 2.21 | 0.79 |
| | 180 | EKMQ451VSN181MP45S | 22 × 45 | P45 | 1.842 | 0.87 |
| | 100 | EKMQ451VSN101MQ25S | 25.4 × 25 | Q25 | 3.316 | 0.64 |
| | 120 | EKMQ451VSN121MQ30S | 25.4 × 30 | Q30 | 2.763 | 0.72 |
| | 150 | EKMQ451VSN151MQ30S | 25.4 × 30 | Q30 | 2.21 | 0.79 |
| | 180 | EKMQ451VSN181MQ40S | 25.4 × 40 | Q40 | 1.842 | 0.87 |
| | 220 | EKMQ451VSN221MQ45S | 25.4 × 45 | Q45 | 1.507 | 1.0 |
| | 270 | EKMQ451VSN271MQ50S | 25.4 × 50 | Q50 | 1.228 | 1.19 |
| | 150 | EKMQ451VSN151MR25S | 30 × 25 | R25 | 2.21 | 0.79 |
| | 180 | EKMQ451VSN181MR30S | 30 × 30 | R30 | 1.842 | 0.87 |
| | 220 | EKMQ451VSN221MR30S | 30 × 30 | R30 | 1.507 | 1.0 |
| | 270 | EKMQ451VSN271MR40S | 30 × 40 | R40 | 1.228 | 1.19 |
| | 330 | EKMQ451VSN331MR45S | 30 × 45 | R45 | 1.005 | 1.38 |
| | 390 | EKMQ451VSN391MR50S | 30 × 50 | R50 | 0.85 | 1.55 |
| | 220 | EKMQ451VSN221MA25S | 35 × 25 | A25 | 1.507 | 1.0 |
| | 270 | EKMQ451VSN271MA30S | 35 × 30 | A30 | 1.228 | 1.19 |
| 330 | EKMQ451VSN331MA35S | 35 × 35 | A35 | 1.005 | 1.38 | |
| 390 | EKMQ451VSN391MA40S | 35 × 40 | A40 | 0.85 | 1.55 | |
| 470 | EKMQ451VSN471MA45S | 35 × 45 | A45 | 0.705 | 1.74 | |
| 560 | EKMQ451VSN561MA50S | 35 × 50 | A50 | 0.592 | 1.9 | |

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

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