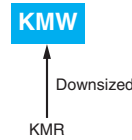


KMW Series

- Downsized from KMR series
- Endurance with ripple current : 2,000 hours at 105°C
- Rated voltage range : 400 to 450V_{dc}, Capacitance range : 120 to 1,000μF
- Non solvent resistant type
- RoHS2 Compliant

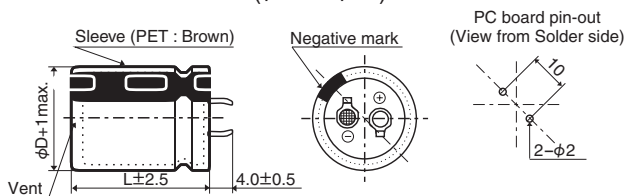


SPECIFICATIONS

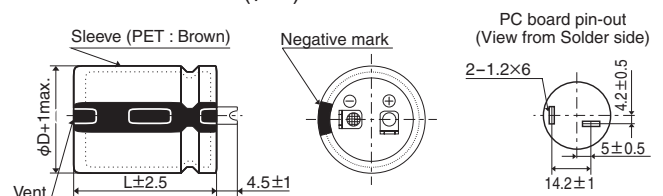
| Items | Characteristics | | |
|--|---|---------------------------------------|-----------------------|
| Category | -25 to +105°C | | |
| Temperature Range | | | |
| Rated Voltage Range | 400 to 450V _{dc} | | |
| Capacitance Tolerance | ±20% (M) (at 20°C, 120Hz) | | |
| Leakage Current | $I \leq 3\sqrt{CV}$ Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 5 minutes) | | |
| Dissipation Factor (tan δ) | Rated voltage (V _{dc}) | 400V | 420 & 450V |
| | tan δ (Max.) | 0.15 | 0.20 (at 20°C, 120Hz) |
| Low Temperature Characteristics (Max. Impedance Ratio) | Rated voltage (V _{dc}) | 400 to 450V | |
| | Z(-25°C)/Z(+20°C) | 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 (the peak voltage shall not exceed the rated voltage) for 2,000 hours at 105°C. | | |
| | Capacitance change | ≤ ±20% of the initial value | |
| | D.F. (tan δ) | ≤ 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. (tan δ) | ≤ 150% of the initial specified value | |
| | Leakage current | ≤ The initial specified value | |

DIMENSIONS [mm]

● Terminal Code : VS (φ22 to φ35) : Standard

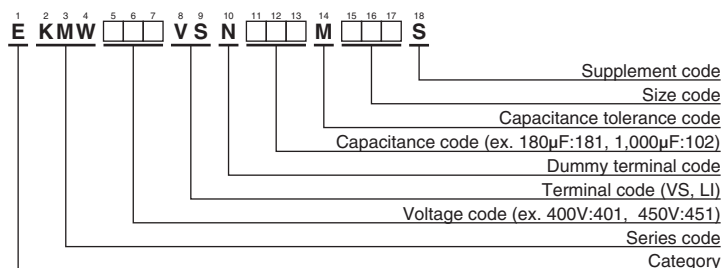


● Terminal Code : LI (φ35)



The standard design has no plastic disc.

PART NUMBERING SYSTEM



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

KMW Series

◆STANDARD RATINGS

| WV (V _{dc}) | Cap (μF) | Case size φD×L(mm) | tan δ | Rated ripple current (Arms/105°C, 120Hz) | Part No. | WV (V _{dc}) | Cap (μF) | Case size φD×L(mm) | tan δ | Rated ripple current (Arms/105°C, 120Hz) | Part No. |
|-----------------------|----------|--------------------|-------|--|--------------------|-----------------------|-----------|--------------------|--------------------|--|--------------------|
| 400 | 150 | 22 × 25 | 0.15 | 0.91 | EKMW401VSN151MP25S | 420 | 330 | 35 × 25 | 0.20 | 1.38 | EKMW421VSN331MA25S |
| | 180 | 22 × 30 | 0.15 | 1.04 | EKMW401VSN181MP30S | | 390 | 25.4 × 45 | 0.20 | 1.67 | EKMW421VSN391MQ45S |
| | 220 | 22 × 35 | 0.15 | 1.18 | EKMW401VSN221MP35S | | 390 | 25.4 × 50 | 0.20 | 1.70 | EKMW421VSN391MQ50S |
| | 220 | 25.4 × 25 | 0.15 | 1.15 | EKMW401VSN221MQ25S | | 390 | 30 × 35 | 0.20 | 1.59 | EKMW421VSN391MR35S |
| | 270 | 25.4 × 30 | 0.15 | 1.31 | EKMW401VSN271MQ30S | | 470 | 30 × 40 | 0.20 | 1.79 | EKMW421VSN471MR40S |
| | 330 | 22 × 45 | 0.15 | 1.50 | EKMW401VSN331MP45S | | 470 | 35 × 30 | 0.20 | 1.67 | EKMW421VSN471MA30S |
| | 330 | 25.4 × 35 | 0.15 | 1.51 | EKMW401VSN331MQ35S | | 560 | 30 × 45 | 0.20 | 2.01 | EKMW421VSN561MR45S |
| | 330 | 30 × 25 | 0.15 | 1.46 | EKMW401VSN331MR25S | | 560 | 35 × 35 | 0.20 | 1.85 | EKMW421VSN561MA35S |
| | 390 | 22 × 50 | 0.15 | 1.67 | EKMW401VSN391MP50S | | 680 | 35 × 40 | 0.20 | 2.11 | EKMW421VSN681MA40S |
| | 390 | 25.4 × 40 | 0.15 | 1.67 | EKMW401VSN391MQ40S | | 450 | 120 | 22 × 25 | 0.20 | 0.78 |
| | 390 | 30 × 30 | 0.15 | 1.61 | EKMW401VSN391MR30S | 150 | | 22 × 30 | 0.20 | 0.91 | EKMW451VSN151MP30S |
| | 390 | 35 × 25 | 0.15 | 1.40 | EKMW401VSN391MA25S | 150 | | 25.4 × 25 | 0.20 | 0.93 | EKMW451VSN151MQ25S |
| | 470 | 25.4 × 45 | 0.15 | 1.87 | EKMW401VSN471MQ45S | 180 | | 22 × 35 | 0.20 | 1.02 | EKMW451VSN181MP35S |
| | 470 | 30 × 35 | 0.15 | 1.81 | EKMW401VSN471MR35S | 180 | | 25.4 × 30 | 0.20 | 1.05 | EKMW451VSN181MQ30S |
| | 560 | 30 × 40 | 0.15 | 2.03 | EKMW401VSN561MR40S | 220 | | 22 × 40 | 0.20 | 1.15 | EKMW451VSN221MP40S |
| | 560 | 35 × 30 | 0.15 | 1.70 | EKMW401VSN561MA30S | 220 | | 25.4 × 35 | 0.20 | 1.21 | EKMW451VSN221MQ35S |
| | 680 | 30 × 45 | 0.15 | 2.29 | EKMW401VSN681MR45S | 220 | | 30 × 25 | 0.20 | 1.15 | EKMW451VSN221MR25S |
| | 680 | 30 × 50 | 0.15 | 2.33 | EKMW401VSN681MR50S | 270 | | 22 × 50 | 0.20 | 1.36 | EKMW451VSN271MP50S |
| | 680 | 35 × 35 | 0.15 | 1.90 | EKMW401VSN681MA35S | 270 | | 25.4 × 40 | 0.20 | 1.36 | EKMW451VSN271MQ40S |
| | 820 | 35 × 40 | 0.15 | 2.16 | EKMW401VSN821MA40S | 270 | 30 × 30 | 0.20 | 1.29 | EKMW451VSN271MR30S | |
| 1,000 | 35 × 50 | 0.15 | 2.50 | EKMW401VSN102MA50S | 330 | 25.4 × 45 | 0.20 | 1.54 | EKMW451VSN331MQ45S | | |
| 420 | 120 | 22 × 25 | 0.20 | 0.78 | EKMW421VSN121MP25S | 330 | 30 × 35 | 0.20 | 1.46 | EKMW451VSN331MR35S | |
| | 150 | 22 × 30 | 0.20 | 0.91 | EKMW421VSN151MP30S | 390 | 25.4 × 50 | 0.20 | 1.70 | EKMW451VSN391MQ50S | |
| | 180 | 25.4 × 25 | 0.20 | 1.02 | EKMW421VSN181MQ25S | 390 | 30 × 40 | 0.20 | 1.63 | EKMW451VSN391MR40S | |
| | 220 | 25.4 × 30 | 0.20 | 1.16 | EKMW421VSN221MQ30S | 390 | 35 × 30 | 0.20 | 1.52 | EKMW451VSN391MA30S | |
| | 270 | 22 × 45 | 0.20 | 1.30 | EKMW421VSN271MP45S | 470 | 30 × 45 | 0.20 | 1.85 | EKMW451VSN471MR45S | |
| | 270 | 25.4 × 35 | 0.20 | 1.34 | EKMW421VSN271MQ35S | 470 | 35 × 35 | 0.20 | 1.77 | EKMW451VSN471MA35S | |
| | 270 | 30 × 25 | 0.20 | 1.28 | EKMW421VSN271MR25S | 560 | 30 × 50 | 0.20 | 2.04 | EKMW451VSN561MR50S | |
| | 330 | 22 × 50 | 0.20 | 1.47 | EKMW421VSN331MP50S | 560 | 35 × 40 | 0.20 | 2.02 | EKMW451VSN561MA40S | |
| | 330 | 25.4 × 40 | 0.20 | 1.51 | EKMW421VSN331MQ40S | 680 | 35 × 45 | 0.20 | 2.16 | EKMW451VSN681MA45S | |
| | 330 | 30 × 30 | 0.20 | 1.43 | EKMW421VSN331MR30S | 820 | 35 × 50 | 0.20 | 2.42 | EKMW451VSN821MA50S | |

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

| Frequency(Hz) | 50 | 120 | 300 | 1k | 10k | 50k |
|---------------------------|------|------|------|------|------|------|
| 400 to 450V _{dc} | 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.