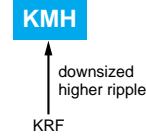


KMH Series

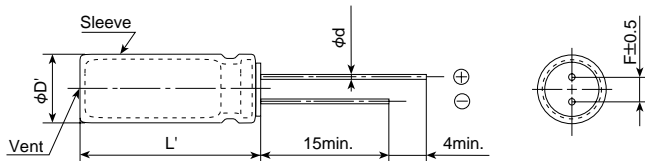
- Radial lead type ranging from φ20×20 to φ22×50mm
- For input filtering of power supplies
- Endurance with ripple current : 105°C 2000 hours
- Non solvent-proof



◆ SPECIFICATIONS

| Items | Characteristics | | |
|--|--|--------------------------------------|------------|
| Category | -25 to +105°C | | |
| Temperature Range | -25 to +105°C | | |
| Rated Voltage Range | 160 to 450V _{dc} | | |
| 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 _{dc}) | 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 2000 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 1000 hours at 105°C without voltage applied. | | |
| | Capacitance change | ≤±20% of the initial value | |
| | D.F. (tanδ) | ≤200% of the initial specified value | |
| | Leakage current | ≤500% of the initial specified value | |

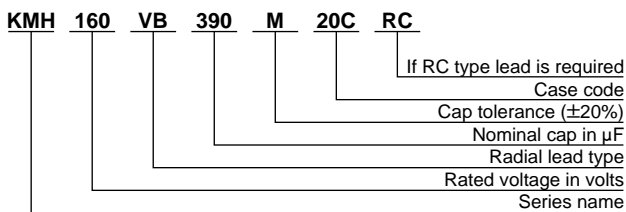
◆ DIMENSIONS (Radial Lead Type=VB) [mm]



| φD | 20 | 22 |
|-----|------------|----|
| φd | 1.0 | |
| F | 10.0 | |
| φD' | φD+0.5max. | |
| L' | L+2.0max. | |

*Note : The snap-in forming type, RC-type, is available upon request, RC-type fits two φ2mm holes and 10mm spacing. See page 23.

◆ PART NUMBERING SYSTEM



◆ CASE CODE [mm]

| Case code | Case size φDXL | Case code | Case size φDXL |
|-----------|----------------|-----------|----------------|
| 20S | 20×20 | 22S | 22×20 |
| 20A | 20×25 | 22A | 22×25 |
| 20B | 20×30 | 22B | 22×30 |
| 20C | 20×35 | 22C | 22×35 |
| 20D | 20×40 | 22D | 22×40 |
| 20E | 20×45 | 22E | 22×45 |
| 20F | 20×50 | 22F | 22×50 |

◆ RATED RIPPLE CURRENT MULTIPLIERS

- Frequency Multipliers

| Frequency (Hz) | 50 | 120 | 300 | 1k | 10k | 50k |
|---------------------------|------|------|------|------|------|------|
| 160 to 250V _{dc} | 0.81 | 1.00 | 1.17 | 1.32 | 1.45 | 1.50 |
| 400 & 450V _{dc} | 0.77 | 1.00 | 1.16 | 1.30 | 1.41 | 1.43 |



◆STANDARD RATINGS

| μF | V _{dc} φD | 160 | | 200 | | 250 | | 400 | | 450 | |
|-----|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|--|---------------|---------------|---------------|
| | | 20 | 22 | 20 | 22 | 20 | 22 | 20 | 22 | 20 | 22 |
| 33 | | | | | | | | 20×20 0.29 | | 20×25 0.31 | |
| 47 | | | | | | | | | 22×20 0.37 | | 22×25 0.42 |
| 56 | | | | | | | | 20×25 0.41 | | 20×30 0.44 | |
| 68 | | | | | | | | 20×30 0.49 | 22×25 0.51 | 20×35 0.51 | 22×30 0.52 |
| 82 | | | | | | 20×20 0.46 | | | | 20×40 0.60 | 22×35 0.60 |
| 100 | | | | | | | | 20×35 0.62 | 22×30 0.64 | 20×45 0.69 | 22×40 0.71 |
| 120 | | | | 20×20 0.52 | | 20×25 0.60 | 22×20 0.59 | 20×40 0.72 | 22×35 0.73 | 20×50 0.78 | 22×45 0.81 |
| 150 | | 20×20 0.58 | | 20×25 0.63 | 22×20 0.62 | | | 20×45 0.85 | 22×40 0.88 | | 22×50 0.93 |
| 180 | | 20×25 0.69 | 22×20 0.68 | 20×25 0.69 | 22×25 0.75 | 20×30 0.79 | 22×25 0.79 | 20×50 0.96 | 22×45 0.99 | | |
| 220 | | 20×25 0.76 | 22×25 0.82 | 20×30 0.82 | 22×25 0.82 | 20×35 0.92 | 22×30 0.95 | | 22×50 1.13 | | |
| 270 | | 20×30 0.91 | 22×25 0.91 | 20×30 0.91 | 22×30 0.98 | 20×40 1.09 | 22×35 1.14 | | | | |
| 330 | | 20×30 1.01 | 22×30 1.16 | 20×35 1.05 | 22×35 1.20 | 20×45 1.26 | 22×40 1.30 | | | | |
| 390 | | 20×35 1.15 | 22×30 1.27 | 20×40 1.22 | 22×35 1.31 | 20×50 1.41 | 22×45 1.49 | ← Upper : Case size φDXL (mm) ← Lower : Rated ripple current (Arms) at 105°C, 120Hz | | | |
| 470 | | 20×40 1.34 | 22×35 1.40 | 20×45 1.34 | 22×40 1.45 | | 22×50 1.65 | | | | |