

# KMA Series

- 7mm height
- Endurance : 1,000 hours at 105°C
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS Compliant

KMA

105°C  
SRA

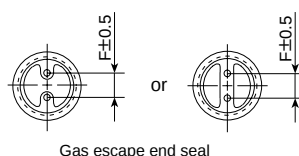
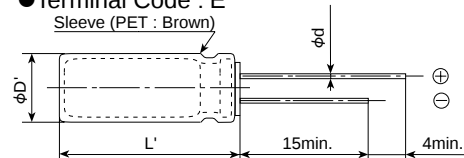


## SPECIFICATIONS

| Items                                                  | Characteristics                                                                                                                                                                                                                                                                         |                                      |      |      |      |      |                            |      |      |                  |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|------|------|------|------|----------------------------|------|------|------------------|
| Category                                               |                                                                                                                                                                                                                                                                                         |                                      |      |      |      |      |                            |      |      |                  |
| Temperature Range                                      | -55 to +105°C                                                                                                                                                                                                                                                                           |                                      |      |      |      |      |                            |      |      |                  |
| Rated Voltage Range                                    | 4 to 63V <sub>dc</sub>                                                                                                                                                                                                                                                                  |                                      |      |      |      |      |                            |      |      |                  |
| Capacitance Tolerance                                  | ±20% (M) (at 20°C, 120Hz)                                                                                                                                                                                                                                                               |                                      |      |      |      |      |                            |      |      |                  |
| Leakage Current                                        | I=0.01CV or 3μA, whichever is greater.<br>Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minutes)                                                                                                                           |                                      |      |      |      |      |                            |      |      |                  |
| Dissipation Factor (tanδ)                              | Rated voltage (V <sub>dc</sub> )                                                                                                                                                                                                                                                        | 4V                                   | 6.3V | 10V  | 16V  | 25V  | 35V                        | 50V  | 63V  | (at 20°C, 120Hz) |
|                                                        | tanδ (Max.)                                                                                                                                                                                                                                                                             | 0.35                                 | 0.22 | 0.19 | 0.16 | 0.14 | 0.12                       | 0.10 | 0.08 |                  |
| Low Temperature Characteristics (Max. Impedance Ratio) | Rated voltage (V <sub>dc</sub> )                                                                                                                                                                                                                                                        | 4V                                   | 6.3V | 10V  | 16V  | 25V  | 35V                        | 50V  | 63V  | (at 120Hz)       |
|                                                        | Z(-25°C)/Z(+20°C)                                                                                                                                                                                                                                                                       | 4                                    | 3    | 2    | 2    | 2    | 2                          | 2    | 2    |                  |
|                                                        | Z(-40°C)/Z(+20°C)                                                                                                                                                                                                                                                                       | 10                                   | 6    | 5    | 3    | 3    | 3                          | 3    | 3    |                  |
| Endurance                                              | The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 1,000 hours at 105°C.                                                                                                                                   |                                      |      |      |      |      |                            |      |      |                  |
|                                                        | Rated voltage                                                                                                                                                                                                                                                                           | 4 to 16V <sub>dc</sub>               |      |      |      |      | 25 to 63V <sub>dc</sub>    |      |      |                  |
|                                                        | Capacitance change                                                                                                                                                                                                                                                                      | ≤±25% of the initial value           |      |      |      |      | ≤±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. |                                      |      |      |      |      |                            |      |      |                  |
|                                                        | Rated voltage                                                                                                                                                                                                                                                                           | 4 to 16V <sub>dc</sub>               |      |      |      |      | 25 to 63V <sub>dc</sub>    |      |      |                  |
|                                                        | Capacitance change                                                                                                                                                                                                                                                                      | ≤±25% of the initial value           |      |      |      |      | ≤±20% of the initial value |      |      |                  |
|                                                        | D.F. (tanδ)                                                                                                                                                                                                                                                                             | ≤200% of the initial specified value |      |      |      |      |                            |      |      |                  |
|                                                        | Leakage current                                                                                                                                                                                                                                                                         | ≤The initial specified value         |      |      |      |      |                            |      |      |                  |

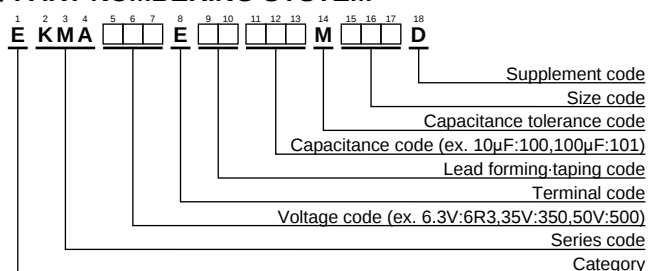
## DIMENSIONS [mm]

### Terminal Code : E



| φD  | 4          | 5    | 6.3  |
|-----|------------|------|------|
| φd  | 0.45       | 0.45 | 0.45 |
| F   | 1.5        | 2.0  | 2.5  |
| φD' | φD+0.5max. |      |      |
| L'  | L+1.0max.  |      |      |

## PART NUMBERING SYSTEM



Please refer to "Product code guide (radial lead type)"

### ◆STANDARD RATINGS

| WV<br>(Vdc) | Cap<br>(μF) | Case size<br>φDXL(mm) | tanδ | Rated ripple<br>current<br>(mA <sub>rms</sub> /105°C,120Hz) | Part No.           | WV<br>(Vdc) | Cap<br>(μF) | Case size<br>φDXL(mm) | tanδ | Rated ripple<br>current<br>(mA <sub>rms</sub> /105°C,120Hz) | Part No.           |
|-------------|-------------|-----------------------|------|-------------------------------------------------------------|--------------------|-------------|-------------|-----------------------|------|-------------------------------------------------------------|--------------------|
| 4           | 33          | 4X7                   | 0.35 | 26                                                          | EKMA4R0E□□330MD07D | 35          | 4.7         | 4X7                   | 0.12 | 20                                                          | EKMA350E□□4R7MD07D |
|             | 47          | 4X7                   | 0.35 | 34                                                          | EKMA4R0E□□470MD07D |             | 10          | 5X7                   | 0.12 | 30                                                          | EKMA350E□□100ME07D |
|             | 100         | 5X7                   | 0.35 | 61                                                          | EKMA4R0E□□101ME07D |             | 22          | 6.3X7                 | 0.12 | 47                                                          | EKMA350E□□220MF07D |
|             | 220         | 6.3X7                 | 0.35 | 95                                                          | EKMA4R0E□□221MF07D |             | 33          | 6.3X7                 | 0.12 | 64                                                          | EKMA350E□□330MF07D |
| 6.3         | 22          | 4X7                   | 0.22 | 31                                                          | EKMA6R3E□□220MD07D | 50          | 1.0         | 4X7                   | 0.10 | 10                                                          | EKMA500E□□1R0MD07D |
|             | 47          | 5X7                   | 0.22 | 47                                                          | EKMA6R3E□□470ME07D |             | 2.2         | 4X7                   | 0.10 | 15                                                          | EKMA500E□□2R2MD07D |
| 10          | 33          | 5X7                   | 0.19 | 43                                                          | EKMA100E□□330ME07D |             | 3.3         | 4X7                   | 0.10 | 18                                                          | EKMA500E□□3R3MD07D |
|             | 100         | 6.3X7                 | 0.19 | 80                                                          | EKMA100E□□101MF07D |             | 4.7         | 5X7                   | 0.10 | 23                                                          | EKMA500E□□4R7ME07D |
| 16          | 10          | 4X7                   | 0.16 | 25                                                          | EKMA160E□□100MD07D |             | 10          | 6.3X7                 | 0.10 | 34                                                          | EKMA500E□□100MF07D |
|             | 22          | 5X7                   | 0.16 | 39                                                          | EKMA160E□□220ME07D |             | 22          | 6.3X7                 | 0.10 | 57                                                          | EKMA500E□□220MF07D |
|             | 47          | 6.3X7                 | 0.16 | 59                                                          | EKMA160E□□470MF07D | 63          | 1.0         | 4X7                   | 0.08 | 11                                                          | EKMA630E□□1R0MD07D |
|             | 100         | 6.3X7                 | 0.16 | 97                                                          | EKMA160E□□101MF07D |             | 2.2         | 4X7                   | 0.08 | 17                                                          | EKMA630E□□2R2MD07D |
| 25          | 33          | 6.3X7                 | 0.14 | 53                                                          | EKMA250E□□330MF07D |             | 3.3         | 5X7                   | 0.08 | 21                                                          | EKMA630E□□3R3ME07D |
|             | 47          | 6.3X7                 | 0.14 | 71                                                          | EKMA250E□□470MF07D |             | 4.7         | 6.3X7                 | 0.08 | 26                                                          | EKMA630E□□4R7MF07D |
|             |             |                       |      |                                                             |                    |             | 10          | 6.3X7                 | 0.08 | 43                                                          | EKMA630E□□100MF07D |

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

# Mouser Electronics

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