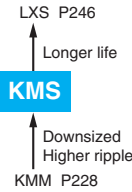


# KMS Series

- For solar power generation
- Endurance with ripple current : 105°C 3,000 hours
- Rated voltage range : 160 to 500V
- Capacitance range : 47 to 3,300μF
- Non solvent resistant type
- RoHS Compliant



**500V Lineup!**

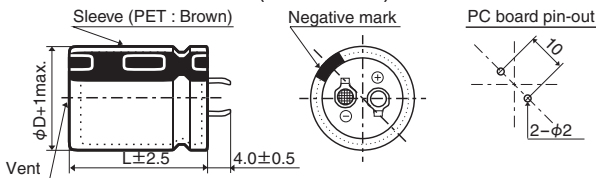


## SPECIFICATIONS

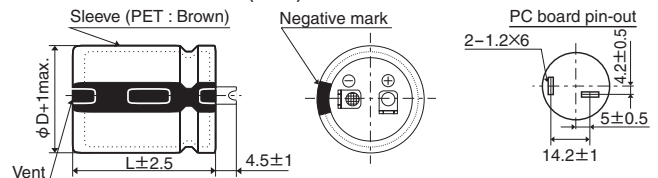
| Items  | Characteristics   |                                       |             |
|--|---|---------------------------------------|-------------|
| Category   | -25 to +105°C   |                                       |             |
| Temperature Range                                      | -25 to +105°C   |                                       |             |
| Rated Voltage Range                                    | 160 to 500V <sub>dc</sub>   |                                       |             |
| Capacitance Tolerance                                  | ±20% (M) (at 20°C, 120Hz)   |                                       |             |
| Leakage Current  | $I \leq 3\sqrt{CV}$<br>Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 5 minutes)  |                                       |             |
| Dissipation Factor (tanδ)                              | Rated voltage (V <sub>dc</sub> )  | 160 to 400V                           | 420 to 500V |
|  | tanδ (Max.)   | 0.15                                  | 0.20        |
| Low Temperature Characteristics (Max. Impedance Ratio) | Rated voltage (V <sub>dc</sub> )  | 160 to 400V                           | 420 to 500V |
|  | Z(-25°C)/Z(+20°C)   | 4                                     | 8           |
| 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 3,000 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 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. (tanδ)   | ≤ 150% of the initial specified value |             |
|  | Leakage current   | ≤ The initial specified value         |             |

## DIMENSIONS [mm]

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

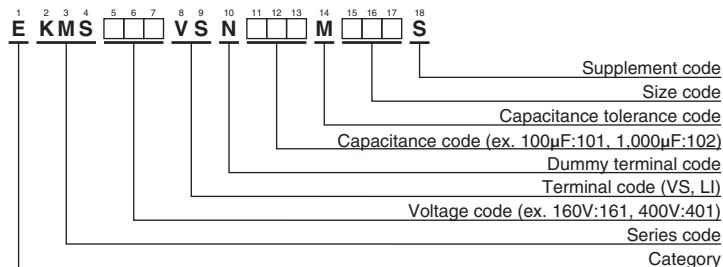


● Terminal Code : LI (φ35)



The standard design has no plastic disc.

## PART NUMBERING SYSTEM



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

◆ STANDARD RATINGS

| WV (Vdc) | Cap (μF) | Case size φD×L(mm) | tanδ | Rated ripple current (Arms/105°C,120Hz) | Part No.           | WV (Vdc) | Cap (μF) | Case size φD×L(mm) | tanδ    | Rated ripple current (Arms/105°C,120Hz) | Part No.           |                    |
|----------|----------|--------------------|------|---|--------------------|----------|----------|--------------------|---------|---|--------------------|--------------------|
| 160      | 470      | 22×25              | 0.15 | 1.47                                    | EKMS161VSN471MP25S | 200      | 1,800    | 30×45              | 0.15    | 3.66                                    | EKMS201VSN182MR45S |                    |
|          | 680      | 22×30              | 0.15 | 1.86                                    | EKMS161VSN681MP30S |          | 1,800    | 30×50              | 0.15    | 3.72                                    | EKMS201VSN182MR50S |                    |
|          | 680      | 25.4×25            | 0.15 | 1.84                                    | EKMS161VSN681MQ25S |          | 1,800    | 35×40              | 0.15    | 3.81                                    | EKMS201VSN182MA40S |                    |
|          | 820      | 22×35              | 0.15 | 2.09                                    | EKMS161VSN821MP35S |          | 2,200    | 35×45              | 0.15    | 4.32                                    | EKMS201VSN222MA45S |                    |
|          | 820      | 25.4×30            | 0.15 | 2.08                                    | EKMS161VSN821MQ30S |          | 2,700    | 35×50              | 0.15    | 4.88                                    | EKMS201VSN272MA50S |                    |
|          | 1,000    | 22×40              | 0.15 | 2.35                                    | EKMS161VSN102MP40S |          | 250      | 270                | 22×25   | 0.15                                    | 1.11               | EKMS251VSN271MP25S |
|          | 1,000    | 22×45              | 0.15 | 2.40                                    | EKMS161VSN102MP45S |          |          | 330                | 22×30   | 0.15                                    | 1.29               | EKMS251VSN331MP30S |
|          | 1,000    | 25.4×35            | 0.15 | 2.40                                    | EKMS161VSN102MQ35S |          |          | 390                | 22×35   | 0.15                                    | 1.44               | EKMS251VSN391MP35S |
|          | 1,000    | 30×25              | 0.15 | 2.50                                    | EKMS161VSN102MR25S |          |          | 390                | 25.4×25 | 0.15                                    | 1.40               | EKMS251VSN391MQ25S |
|          | 1,200    | 22×50              | 0.15 | 2.69                                    | EKMS161VSN122MP50S |          |          | 470                | 22×40   | 0.15                                    | 1.61               | EKMS251VSN471MP40S |
|          | 1,200    | 25.4×40            | 0.15 | 2.68                                    | EKMS161VSN122MQ40S |          |          | 470                | 25.4×30 | 0.15                                    | 1.57               | EKMS251VSN471MQ30S |
|          | 1,200    | 30×30              | 0.15 | 2.77                                    | EKMS161VSN122MR30S |          |          | 560                | 22×45   | 0.15                                    | 1.79               | EKMS251VSN561MP45S |
|          | 1,200    | 35×25              | 0.15 | 2.91                                    | EKMS161VSN122MA25S |          |          | 560                | 25.4×35 | 0.15                                    | 1.79               | EKMS251VSN561MQ35S |
|          | 1,500    | 25.4×45            | 0.15 | 3.05                                    | EKMS161VSN152MQ45S |          |          | 560                | 30×25   | 0.15                                    | 1.87               | EKMS251VSN561MP25S |
|          | 1,500    | 30×35              | 0.15 | 3.17                                    | EKMS161VSN152MR35S |          |          | 680                | 22×50   | 0.15                                    | 2.02               | EKMS251VSN681MP50S |
|          | 1,800    | 25.4×50            | 0.15 | 3.40                                    | EKMS161VSN182MQ50S |          |          | 680                | 25.4×40 | 0.15                                    | 2.02               | EKMS251VSN681MQ40S |
|          | 1,800    | 30×40              | 0.15 | 3.57                                    | EKMS161VSN182MR40S |          |          | 680                | 30×30   | 0.15                                    | 2.08               | EKMS251VSN681MR30S |
|          | 1,800    | 35×30              | 0.15 | 3.62                                    | EKMS161VSN182MA30S |          |          | 680                | 35×25   | 0.15                                    | 2.19               | EKMS251VSN681MA25S |
|          | 2,200    | 30×45              | 0.15 | 4.05                                    | EKMS161VSN222MR45S |          |          | 820                | 25.4×45 | 0.15                                    | 2.26               | EKMS251VSN821MQ45S |
|          | 2,200    | 35×35              | 0.15 | 4.07                                    | EKMS161VSN222MA35S |          |          | 820                | 30×35   | 0.15                                    | 2.34               | EKMS251VSN821MR35S |
| 2,700    | 30×50    | 0.15               | 4.56 | EKMS161VSN272MR50S                      | 1,000              | 25.4×50  |          | 0.15               | 2.53    | EKMS251VSN102MQ50S                      |                    |                    |
| 2,700    | 35×40    | 0.15               | 4.67 | EKMS161VSN272MA40S                      | 1,000              | 30×40    |          | 0.15               | 2.66    | EKMS251VSN102MR40S                      |                    |                    |
| 2,700    | 35×45    | 0.15               | 4.78 | EKMS161VSN272MA45S                      | 1,000              | 35×30    |          | 0.15               | 2.70    | EKMS251VSN102MA30S                      |                    |                    |
| 3,300    | 35×50    | 0.15               | 5.40 | EKMS161VSN332MA50S                      | 1,200              | 30×45    |          | 0.15               | 2.99    | EKMS251VSN122MR45S                      |                    |                    |
| 180      | 390      | 22×25              | 0.15 | 1.34                                    | EKMS181VSN391MP25S | 1,200    |          | 30×50              | 0.15    | 3.04                                    | EKMS251VSN122MR50S |                    |
|          | 560      | 22×30              | 0.15 | 1.68                                    | EKMS181VSN561MP30S | 1,200    | 35×35    | 0.15               | 3.00    | EKMS251VSN122MA35S                      |                    |                    |
|          | 560      | 25.4×25            | 0.15 | 1.67                                    | EKMS181VSN561MQ25S | 1,500    | 35×40    | 0.15               | 3.48    | EKMS251VSN152MA40S                      |                    |                    |
|          | 680      | 22×35              | 0.15 | 1.90                                    | EKMS181VSN681MP35S | 1,500    | 35×45    | 0.15               | 3.56    | EKMS251VSN152MA45S                      |                    |                    |
|          | 820      | 22×40              | 0.15 | 2.13                                    | EKMS181VSN821MP40S | 1,800    | 35×50    | 0.15               | 3.98    | EKMS251VSN182MA50S                      |                    |                    |
|          | 820      | 25.4×30            | 0.15 | 2.08                                    | EKMS181VSN821MQ30S | 315      | 180      | 22×25              | 0.15    | 0.95                                    | EKMS3B1VSN181MP25S |                    |
|          | 820      | 30×25              | 0.15 | 2.26                                    | EKMS181VSN821MR25S |          | 220      | 22×30              | 0.15    | 1.10                                    | EKMS3B1VSN221MP30S |                    |
|          | 1,000    | 22×45              | 0.15 | 2.40                                    | EKMS181VSN102MP45S |          | 220      | 25.4×25            | 0.15    | 1.10                                    | EKMS3B1VSN221MQ25S |                    |
|          | 1,000    | 22×50              | 0.15 | 2.45                                    | EKMS181VSN102MP50S |          | 270      | 22×35              | 0.15    | 1.24                                    | EKMS3B1VSN271MP35S |                    |
|          | 1,000    | 25.4×35            | 0.15 | 2.40                                    | EKMS181VSN102MQ35S |          | 330      | 22×40              | 0.15    | 1.40                                    | EKMS3B1VSN331MP40S |                    |
|          | 1,000    | 25.4×40            | 0.15 | 2.45                                    | EKMS181VSN102MQ40S |          | 330      | 25.4×30            | 0.15    | 1.38                                    | EKMS3B1VSN331MQ30S |                    |
|          | 1,000    | 30×30              | 0.15 | 2.52                                    | EKMS181VSN102MR30S |          | 330      | 30×25              | 0.15    | 1.43                                    | EKMS3B1VSN331MR25S |                    |
|          | 1,200    | 25.4×45            | 0.15 | 2.73                                    | EKMS181VSN122MQ45S |          | 390      | 22×45              | 0.15    | 1.56                                    | EKMS3B1VSN391MP45S |                    |
|          | 1,200    | 30×35              | 0.15 | 2.83                                    | EKMS181VSN122MR35S |          | 390      | 22×50              | 0.15    | 1.59                                    | EKMS3B1VSN391MP50S |                    |
|          | 1,200    | 35×25              | 0.15 | 2.91                                    | EKMS181VSN122MA25S |          | 390      | 25.4×35            | 0.15    | 1.57                                    | EKMS3B1VSN391MQ35S |                    |
|          | 1,500    | 25.4×50            | 0.15 | 3.10                                    | EKMS181VSN152MQ50S |          | 470      | 25.4×40            | 0.15    | 1.76                                    | EKMS3B1VSN471MQ40S |                    |
|          | 1,500    | 30×40              | 0.15 | 3.26                                    | EKMS181VSN152MR40S |          | 470      | 30×30              | 0.15    | 1.73                                    | EKMS3B1VSN471MR30S |                    |
|          | 1,500    | 35×30              | 0.15 | 3.31                                    | EKMS181VSN152MA30S |          | 470      | 35×25              | 0.15    | 1.82                                    | EKMS3B1VSN471MA25S |                    |
|          | 1,800    | 30×45              | 0.15 | 3.66                                    | EKMS181VSN182MR45S |          | 560      | 25.4×45            | 0.15    | 1.96                                    | EKMS3B1VSN561MQ45S |                    |
|          | 1,800    | 35×35              | 0.15 | 3.68                                    | EKMS181VSN182MA35S |          | 560      | 25.4×50            | 0.15    | 1.99                                    | EKMS3B1VSN561MQ50S |                    |
| 2,200    | 30×50    | 0.15               | 4.11 | EKMS181VSN222MR50S                      | 560                |          | 30×35    | 0.15               | 1.93    | EKMS3B1VSN561MR35S                      |                    |                    |
| 2,200    | 35×40    | 0.15               | 4.22 | EKMS181VSN222MA40S                      | 560                |          | 35×30    | 0.15               | 2.02    | EKMS3B1VSN561MA30S                      |                    |                    |
| 2,700    | 35×45    | 0.15               | 4.78 | EKMS181VSN272MA45S                      | 680                |          | 30×40    | 0.15               | 2.19    | EKMS3B1VSN681MP40S                      |                    |                    |
| 2,700    | 35×50    | 0.15               | 4.88 | EKMS181VSN272MA50S                      | 680                |          | 35×35    | 0.15               | 2.26    | EKMS3B1VSN681MA35S                      |                    |                    |
| 200      | 390      | 22×25              | 0.15 | 1.34                                    | EKMS201VSN391MP25S |          | 820      | 30×45              | 0.15    | 2.47                                    | EKMS3B1VSN821MR45S |                    |
|          | 470      | 22×30              | 0.15 | 1.54                                    | EKMS201VSN471MP30S | 820      | 30×50    | 0.15               | 2.51    | EKMS3B1VSN821MR50S                      |                    |                    |
|          | 560      | 22×35              | 0.15 | 1.72                                    | EKMS201VSN561MP35S | 820      | 35×40    | 0.15               | 2.57    | EKMS3B1VSN821MQ40S                      |                    |                    |
|          | 560      | 25.4×25            | 0.15 | 1.67                                    | EKMS201VSN561MQ25S | 1,000    | 35×45    | 0.15               | 2.91    | EKMS3B1VSN102MA45S                      |                    |                    |
|          | 680      | 22×40              | 0.15 | 1.94                                    | EKMS201VSN681MP40S | 1,200    | 35×50    | 0.15               | 3.25    | EKMS3B1VSN122MA50S                      |                    |                    |
|          | 680      | 25.4×30            | 0.15 | 1.89                                    | EKMS201VSN681MQ30S | 400      | 120      | 22×25              | 0.15    | 0.77                                    | EKMS401VSN121MP25S |                    |
|          | 820      | 22×45              | 0.15 | 2.17                                    | EKMS201VSN821MP45S |          | 150      | 22×30              | 0.15    | 0.90                                    | EKMS401VSN151MP30S |                    |
|          | 820      | 25.4×35            | 0.15 | 2.17                                    | EKMS201VSN821MQ35S |          | 180      | 22×35              | 0.15    | 1.02                                    | EKMS401VSN181MP35S |                    |
|          | 820      | 30×25              | 0.15 | 2.26                                    | EKMS201VSN821MR25S |          | 180      | 25.4×25            | 0.15    | 0.99                                    | EKMS401VSN181MQ25S |                    |
|          | 1,000    | 22×50              | 0.15 | 2.45                                    | EKMS201VSN102MP50S |          | 220      | 22×40              | 0.15    | 1.15                                    | EKMS401VSN221MP40S |                    |
|          | 1,000    | 25.4×40            | 0.15 | 2.45                                    | EKMS201VSN102MQ40S |          | 220      | 25.4×30            | 0.15    | 1.13                                    | EKMS401VSN221MQ30S |                    |
|          | 1,000    | 30×30              | 0.15 | 2.52                                    | EKMS201VSN102MR30S |          | 270      | 22×45              | 0.15    | 1.29                                    | EKMS401VSN271MP45S |                    |
|          | 1,000    | 35×25              | 0.15 | 2.66                                    | EKMS201VSN102MA25S |          | 270      | 25.4×35            | 0.15    | 1.30                                    | EKMS401VSN271MQ35S |                    |
|          | 1,200    | 25.4×45            | 0.15 | 2.73                                    | EKMS201VSN122MQ45S |          | 270      | 30×25              | 0.15    | 1.29                                    | EKMS401VSN271MR25S |                    |
|          | 1,200    | 25.4×50            | 0.15 | 2.78                                    | EKMS201VSN122MQ50S |          | 330      | 22×50              | 0.15    | 1.47                                    | EKMS401VSN331MP50S |                    |
|          | 1,200    | 30×35              | 0.15 | 2.83                                    | EKMS201VSN122MR35S |          | 330      | 25.4×40            | 0.15    | 1.47                                    | EKMS401VSN331MQ40S |                    |
|          | 1,200    | 35×30              | 0.15 | 2.96                                    | EKMS201VSN122MA30S |          | 330      | 30×30              | 0.15    | 1.45                                    | EKMS401VSN331MR30S |                    |
|          | 1,500    | 30×40              | 0.15 | 3.26                                    | EKMS201VSN152MR40S |          | 330      | 35×25              | 0.15    | 1.52                                    | EKMS401VSN331MA25S |                    |
|          | 1,500    | 35×35              | 0.15 | 3.36                                    | EKMS201VSN152MA35S |          | 390      | 25.4×45            | 0.15    | 1.63                                    | EKMS401VSN391MQ45S |                    |

◆STANDARD RATINGS

| WV (V <sub>dc</sub> ) | Cap (μF) | Case size φD×L(mm) | tanδ | Rated ripple current (Arms/105°C,120Hz) | Part No.           | WV (V <sub>dc</sub> ) | Cap (μF) | Case size φD×L(mm) | tanδ               | Rated ripple current (Arms/105°C,120Hz) | Part No.           |                    |
|-----------------------|----------|--------------------|------|---|--------------------|-----------------------|----------|--------------------|--------------------|---|--------------------|--------------------|
| 400                   | 390      | 25.4×50            | 0.15 | 1.66                                    | EKMS401VSN391MQ50S | 450                   | 180      | 25.4×35            | 0.20               | 1.06                                    | EKMS451VSN181MQ35S |                    |
|                       | 390      | 30×35              | 0.15 | 1.61                                    | EKMS401VSN391MR35S |                       | 180      | 30×25              | 0.20               | 1.06                                    | EKMS451VSN181MR25S |                    |
|                       | 470      | 30×40              | 0.15 | 1.82                                    | EKMS401VSN471MR40S |                       | 220      | 22×50              | 0.20               | 1.20                                    | EKMS451VSN221MP50S |                    |
|                       | 470      | 35×30              | 0.15 | 1.85                                    | EKMS401VSN471MA30S |                       | 220      | 25.4×40            | 0.20               | 1.20                                    | EKMS451VSN221MQ40S |                    |
|                       | 560      | 30×45              | 0.15 | 2.04                                    | EKMS401VSN561MR45S |                       | 220      | 30×30              | 0.20               | 1.18                                    | EKMS451VSN221MR30S |                    |
|                       | 560      | 30×50              | 0.15 | 2.07                                    | EKMS401VSN561MR50S |                       | 220      | 35×25              | 0.20               | 1.24                                    | EKMS451VSN221MA25S |                    |
|                       | 560      | 35×35              | 0.15 | 2.05                                    | EKMS401VSN561MA35S |                       | 270      | 25.4×45            | 0.20               | 1.36                                    | EKMS451VSN271MQ45S |                    |
|                       | 680      | 35×40              | 0.15 | 2.34                                    | EKMS401VSN681MA40S |                       | 270      | 25.4×50            | 0.20               | 1.38                                    | EKMS451VSN271MQ50S |                    |
|                       | 680      | 35×45              | 0.15 | 2.40                                    | EKMS401VSN681MA45S |                       | 270      | 30×35              | 0.20               | 1.34                                    | EKMS451VSN271MR35S |                    |
| 820                   | 35×50    | 0.15               | 2.69 | EKMS401VSN821MA50S                      | 270                | 35×30                 | 0.20     | 1.40               | EKMS451VSN271MA30S |   |                    |                    |
| 420                   | 100      | 22×25              | 0.20 | 0.70                                    | EKMS421VSN101MP25S | 450                   | 330      | 30×40              | 0.20               | 1.52                                    | EKMS451VSN331MR40S |                    |
|                       | 120      | 22×30              | 0.20 | 0.81                                    | EKMS421VSN121MP30S |                       | 390      | 30×45              | 0.20               | 1.70                                    | EKMS451VSN391MR45S |                    |
|                       | 120      | 25.4×25            | 0.20 | 0.81                                    | EKMS421VSN121MQ25S |                       | 390      | 30×50              | 0.20               | 1.73                                    | EKMS451VSN391MR50S |                    |
|                       | 150      | 22×35              | 0.20 | 0.93                                    | EKMS421VSN151MP35S |                       | 390      | 35×35              | 0.20               | 1.71                                    | EKMS451VSN391MA35S |                    |
|                       | 180      | 22×40              | 0.20 | 1.04                                    | EKMS421VSN181MP40S |                       | 470      | 35×40              | 0.20               | 1.95                                    | EKMS451VSN471MA40S |                    |
|                       | 180      | 25.4×30            | 0.20 | 1.02                                    | EKMS421VSN181MQ30S |                       | 470      | 35×45              | 0.20               | 1.99                                    | EKMS451VSN471MA45S |                    |
|                       | 180      | 30×25              | 0.20 | 1.06                                    | EKMS421VSN181MR25S |                       | 560      | 35×50              | 0.20               | 2.22                                    | EKMS451VSN561MA50S |                    |
|                       | 220      | 22×45              | 0.20 | 1.17                                    | EKMS421VSN221MP45S |                       | 500      | 47                 | 22×25              | 0.20                                    | 0.51               | EKMS501VSN470MP25S |
|                       | 220      | 22×50              | 0.20 | 1.20                                    | EKMS421VSN221MP50S |                       |          | 56                 | 22×30              | 0.20                                    | 0.58               | EKMS501VSN560MP30S |
|                       | 220      | 25.4×35            | 0.20 | 1.18                                    | EKMS421VSN221MQ35S |                       |          | 68                 | 25.4×25            | 0.20                                    | 0.65               | EKMS501VSN680MQ25S |
|                       | 220      | 30×30              | 0.20 | 1.18                                    | EKMS421VSN221MR30S |                       |          | 82                 | 22×35              | 0.20                                    | 0.72               | EKMS501VSN820MP35S |
|                       | 270      | 25.4×40            | 0.20 | 1.33                                    | EKMS421VSN271MQ40S |                       |          | 82                 | 25.4×30            | 0.20                                    | 0.74               | EKMS501VSN820MQ30S |
|                       | 270      | 25.4×45            | 0.20 | 1.36                                    | EKMS421VSN271MQ45S | 100                   |          | 22×45              | 0.20               | 0.83                                    | EKMS501VSN101MP45S |                    |
|                       | 270      | 35×25              | 0.20 | 1.38                                    | EKMS421VSN271MA25S | 100                   |          | 30×25              | 0.20               | 0.82                                    | EKMS501VSN101MR25S |                    |
|                       | 330      | 25.4×50            | 0.20 | 1.52                                    | EKMS421VSN331MQ50S | 120                   |          | 22×50              | 0.20               | 0.93                                    | EKMS501VSN121MP50S |                    |
|                       | 330      | 30×35              | 0.20 | 1.48                                    | EKMS421VSN331MR35S | 120                   |          | 25.4×35            | 0.20               | 0.93                                    | EKMS501VSN121MQ35S |                    |
|                       | 330      | 30×40              | 0.20 | 1.52                                    | EKMS421VSN331MR40S | 120                   |          | 30×30              | 0.20               | 0.91                                    | EKMS501VSN121MR30S |                    |
|                       | 330      | 35×30              | 0.20 | 1.55                                    | EKMS421VSN331MA30S | 150                   |          | 25.4×45            | 0.20               | 1.08                                    | EKMS501VSN151MQ45S |                    |
|                       | 390      | 30×45              | 0.20 | 1.70                                    | EKMS421VSN391MR45S | 150                   |          | 30×35              | 0.20               | 1.04                                    | EKMS501VSN151MR35S |                    |
|                       | 390      | 35×35              | 0.20 | 1.71                                    | EKMS421VSN391MA35S | 150                   |          | 35×25              | 0.20               | 0.99                                    | EKMS501VSN151MA25S |                    |
|                       | 470      | 30×50              | 0.20 | 1.90                                    | EKMS421VSN471MR50S | 180                   |          | 25.4×50            | 0.20               | 1.20                                    | EKMS501VSN181MQ50S |                    |
| 470                   | 35×40    | 0.20               | 1.95 | EKMS421VSN471MA40S                      | 180                | 30×40                 |          | 0.20               | 1.17               | EKMS501VSN181MR40S                      |                    |                    |
| 560                   | 35×45    | 0.20               | 2.17 | EKMS421VSN561MA45S                      | 180                | 35×30                 |          | 0.20               | 1.10               | EKMS501VSN181MA30S                      |                    |                    |
| 680                   | 35×50    | 0.20               | 2.45 | EKMS421VSN681MA50S                      | 220                | 30×45                 |          | 0.20               | 1.33               | EKMS501VSN221MR45S                      |                    |                    |
| 450                   | 82       | 22×25              | 0.20 | 0.64                                    | EKMS451VSN820MP25S | 220                   |          | 35×35              | 0.20               | 1.23                                    | EKMS501VSN221MA35S |                    |
|                       | 120      | 22×30              | 0.20 | 0.81                                    | EKMS451VSN121MP30S | 270                   |          | 30×50              | 0.20               | 1.50                                    | EKMS501VSN271MR50S |                    |
|                       | 120      | 22×35              | 0.20 | 0.83                                    | EKMS451VSN121MP35S | 270                   | 35×40    | 0.20               | 1.42               | EKMS501VSN271MA40S                      |                    |                    |
|                       | 120      | 25.4×25            | 0.20 | 0.81                                    | EKMS451VSN121MQ25S | 330                   | 35×45    | 0.20               | 1.60               | EKMS501VSN331MA45S                      |                    |                    |
|                       | 150      | 22×40              | 0.20 | 0.94                                    | EKMS451VSN151MP40S | 390                   | 35×50    | 0.20               | 1.78               | EKMS501VSN391MA50S                      |                    |                    |
|                       | 150      | 25.4×30            | 0.20 | 0.93                                    | EKMS451VSN151MQ30S | 470                   | 35×60    | 0.20               | 2.03               | EKMS501VSN471MA60S                      |                    |                    |
|                       | 180      | 22×45              | 0.20 | 1.06                                    | EKMS451VSN181MP45S |                       |          |                    |                    |   |                    |                    |

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

| Frequency(Hz)             | 50   | 120  | 300  | 1k   | 10k  | 50k  |
|---------------------------|------|------|------|------|------|------|
| 160 to 250V <sub>dc</sub> | 0.81 | 1.00 | 1.17 | 1.32 | 1.45 | 1.50 |
| 315 to 450V <sub>dc</sub> | 0.77 | 1.00 | 1.16 | 1.30 | 1.41 | 1.43 |
| 500V <sub>dc</sub>        | 0.70 | 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.