

# 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

LXS P268  
Longer life  
**KMS**  
Downsized  
Higher ripple  
KMM P250

**500V  
Lineup!**

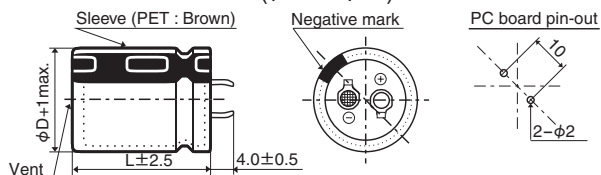


## SPECIFICATIONS

| Items                                                  | Characteristics                                                                                                                                                                                                                                                                       |                                       |             |                 |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-------------|-----------------|
| Category                                               | -25 to +105℃                                                                                                                                                                                                                                                                          |                                       |             |                 |
| Temperature Range                                      |                                                                                                                                                                                                                                                                                       |                                       |             |                 |
| Rated Voltage Range                                    | 160 to 500V <sub>dc</sub>                                                                                                                                                                                                                                                             |                                       |             |                 |
| Capacitance Tolerance                                  | ± 20% (M) (at 20℃, 120Hz)                                                                                                                                                                                                                                                             |                                       |             |                 |
| Leakage Current                                        | I ≤ 3√CV<br>Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20℃ after 5 minutes)                                                                                                                                                        |                                       |             |                 |
| Dissipation Factor (tan δ )                            | Rated voltage (V <sub>dc</sub> )                                                                                                                                                                                                                                                      | 160 to 400V                           | 420 to 500V | (at 20℃, 120Hz) |
|                                                        | tan δ (Max.)                                                                                                                                                                                                                                                                          | 0.15                                  | 0.20        |                 |
| Low Temperature Characteristics (Max. Impedance Ratio) | Rated voltage (V <sub>dc</sub> )                                                                                                                                                                                                                                                      | 160 to 400V                           | 420 to 500V | (at 120Hz)      |
|                                                        | Z(-25℃)/Z(+20℃)                                                                                                                                                                                                                                                                       | 4                                     | 8           |                 |
| Endurance                                              | The following specifications shall be satisfied when the capacitors are restored to 20℃ 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℃.                                         |                                       |             |                 |
|                                                        | 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℃ after exposing them for 1,000 hours at 105℃ 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         |             |                 |

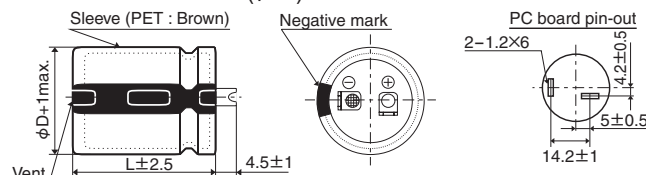
## DIMENSIONS [mm]

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

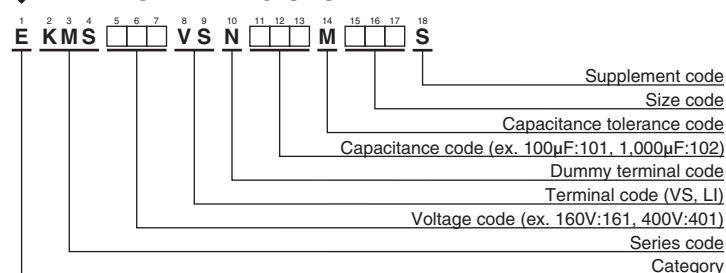


The standard design has no plastic disc.

### Terminal Code : LI (φ35)



## PART NUMBERING SYSTEM



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

◆STANDARD RATINGS

| WV<br>(V <sub>dc</sub> ) | Cap<br>(μF) | Case size<br>φD×L(mm) | tan δ | Rated ripple<br>current<br>(Arms/<br>105°C, 120Hz) | Part No.           | WV<br>(V <sub>dc</sub> ) | Cap<br>(μF) | Case size<br>φD×L(mm) | tan δ | Rated ripple<br>current<br>(Arms/<br>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                                               | EKMS251VSN561MR25S |
|                          | 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 | 315                      | 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 |                          | 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 |
| 200                      | 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 | 400                      | 680         | 30 × 40               | 0.15  | 2.19                                               | EKMS3B1VSN681MR40S |
|                          | 2,700       | 35 × 50               | 0.15  | 4.88                                               | EKMS181VSN272MA50S |                          | 680         | 35 × 35               | 0.15  | 2.26                                               | EKMS3B1VSN681MA35S |
|                          | 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                                               | EKMS3B1VSN821MA40S |
|                          | 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 |                          | 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 |

# KMS Series

## ◆STANDARD RATINGS

| WV<br>(V <sub>dc</sub> ) | Cap<br>(μF) | Case size<br>φD×L(mm) | tan δ | Rated ripple<br>current<br>(Arms/<br>105°C, 120Hz) | Part No.           | WV<br>(V <sub>dc</sub> ) | Cap<br>(μF) | Case size<br>φD×L(mm) | tan δ | Rated ripple<br>current<br>(Arms/<br>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 |                          | 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.