

# LXM Series

- Endurance with ripple current : 7,000 hours at 105°C
- Non solvent resistant type
- RoHS2 Compliant

LXM

Longer life

LXQ



## SPECIFICATIONS

| Items  | Characteristics   |                                       |            |
|--|---|---------------------------------------|------------|
| Category   | -25 to +105°C   |                                       |            |
| Temperature Range                                      |   |                                       |            |
| Rated Voltage Range                                    | 160 to 450V <sub>dc</sub>   |                                       |            |
| Capacitance Tolerance                                  | ±20% (M) (at 20°C, 120Hz)   |                                       |            |
| Leakage Current  | I ≤ 3√CV<br>Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 5 minutes)   |                                       |            |
| Dissipation Factor (tan δ)                             | Rated voltage (V <sub>dc</sub> )  | 160 to 400V                           | 420 & 450V |
|  | tan δ (Max.)  | 0.15                                  | 0.20       |
| Low Temperature Characteristics (Max. Impedance Ratio) | Rated voltage (V <sub>dc</sub> )  | 160 to 400V                           | 420 & 450V |
|  | 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 7,000 hours at 105°C.   |                                       |            |
|  | Capacitance change  | ≤ ±20% of the initial value           |            |
|  | D.F. (tan δ)  | ≤ 250% of the initial specified value |            |
|  | Leakage current   | ≤ The initial specified value         |            |
| Shelf Life   | The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4. |                                       |            |
|  | Capacitance change  | ≤ ±15% of the initial value           |            |
|  | D.F. (tan δ)  | ≤ 150% of the initial specified value |            |
|  | Leakage current   | ≤ The initial specified value         |            |

## DIMENSIONS [mm]

Terminal Code : VS (φ22 to φ35) : Standard

Terminal Code : LI (φ35)



\* φD=35mm : 3.5±0.5mm

The standard design has no plastic disc.

## 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                      | 330         | 22 × 25               | 0.15  | 1.11   | ELXM161VSN331MP25S | 220                      | 220         | 22 × 25               | 0.15               | 0.90   | ELXM221VSN221MP25S |
|                          | 390         | 22 × 30               | 0.15  | 1.26   | ELXM161VSN391MP30S |                          | 270         | 22 × 30               | 0.15               | 1.05   | ELXM221VSN271MP30S |
|                          | 470         | 22 × 30               | 0.15  | 1.39   | ELXM161VSN471MP30S |                          | 330         | 22 × 35               | 0.15               | 1.19   | ELXM221VSN331MP35S |
|                          | 470         | 25.4 × 25             | 0.15  | 1.38   | ELXM161VSN471MQ25S |                          | 330         | 25.4 × 25             | 0.15               | 1.16   | ELXM221VSN331MQ25S |
|                          | 560         | 22 × 35               | 0.15  | 1.55   | ELXM161VSN561MP35S |                          | 390         | 22 × 40               | 0.15               | 1.33   | ELXM221VSN391MP40S |
|                          | 560         | 25.4 × 30             | 0.15  | 1.55   | ELXM161VSN561MQ30S |                          | 390         | 25.4 × 30             | 0.15               | 1.29   | ELXM221VSN391MQ30S |
|                          | 680         | 22 × 40               | 0.15  | 1.75   | ELXM161VSN681MP40S |                          | 470         | 22 × 45               | 0.15               | 1.49   | ELXM221VSN471MP45S |
|                          | 680         | 25.4 × 35             | 0.15  | 1.78   | ELXM161VSN681MQ35S |                          | 470         | 25.4 × 35             | 0.15               | 1.48   | ELXM221VSN471MQ35S |
|                          | 680         | 30 × 25               | 0.15  | 1.74   | ELXM161VSN681MR25S |                          | 470         | 30 × 25               | 0.15               | 1.45   | ELXM221VSN471MR25S |
|                          | 820         | 22 × 50               | 0.15  | 1.97   | ELXM161VSN821MP50S |                          | 560         | 22 × 50               | 0.15               | 1.63   | ELXM221VSN561MP50S |
|                          | 820         | 25.4 × 40             | 0.15  | 2.01   | ELXM161VSN821MQ40S |                          | 560         | 25.4 × 40             | 0.15               | 1.71   | ELXM221VSN561MQ40S |
|                          | 820         | 30 × 30               | 0.15  | 1.96   | ELXM161VSN821MR30S |                          | 560         | 30 × 30               | 0.15               | 1.62   | ELXM221VSN561MR30S |
|                          | 1,000       | 25.4 × 45             | 0.15  | 2.27   | ELXM161VSN102MQ45S |                          | 680         | 25.4 × 45             | 0.15               | 1.87   | ELXM221VSN681MQ45S |
|                          | 1,000       | 30 × 35               | 0.15  | 2.26   | ELXM161VSN102MR35S |                          | 680         | 30 × 35               | 0.15               | 1.86   | ELXM221VSN681MR35S |
|                          | 1,200       | 25.4 × 50             | 0.15  | 2.54   | ELXM161VSN122MQ50S |                          | 820         | 25.4 × 50             | 0.15               | 2.10   | ELXM221VSN821MQ50S |
|                          | 1,200       | 30 × 40               | 0.15  | 2.56   | ELXM161VSN122MR40S |                          | 820         | 30 × 40               | 0.15               | 2.12   | ELXM221VSN821MR40S |
|                          | 1,200       | 35 × 30               | 0.15  | 2.52   | ELXM161VSN122MA30S |                          | 820         | 35 × 30               | 0.15               | 2.08   | ELXM221VSN821MA30S |
|                          | 1,500       | 30 × 45               | 0.15  | 2.96   | ELXM161VSN152MR45S |                          | 1,000       | 30 × 50               | 0.15               | 2.48   | ELXM221VSN102MR50S |
|                          | 1,500       | 35 × 35               | 0.15  | 2.89   | ELXM161VSN152MA35S |                          | 1,000       | 35 × 40               | 0.15               | 2.46   | ELXM221VSN102MA40S |
|                          | 1,800       | 30 × 50               | 0.15  | 3.32   | ELXM161VSN182MR50S |                          | 1,200       | 35 × 45               | 0.15               | 2.78   | ELXM221VSN122MA45S |
| 1,800                    | 35 × 40     | 0.15                  | 3.30  | ELXM161VSN182MA40S                                 | 1,500              | 35 × 50                  | 0.15        | 3.20                  | ELXM221VSN152MA50S |  |                    |
| 2,200                    | 35 × 50     | 0.15                  | 3.87  | ELXM161VSN222MA50S                                 | 180                | 22 × 25                  | 0.15        | 0.82                  | ELXM251VSN181MP25S |  |                    |
| 180                      | 270         | 22 × 25               | 0.15  | 1.00   | ELXM181VSN271MP25S | 220                      | 22 × 30     | 0.15                  | 0.95               | ELXM251VSN221MP30S                                 |                    |
|                          | 330         | 22 × 30               | 0.15  | 1.16   | ELXM181VSN331MP30S | 270                      | 22 × 35     | 0.15                  | 1.08               | ELXM251VSN271MP35S                                 |                    |
|                          | 390         | 22 × 30               | 0.15  | 1.26   | ELXM181VSN391MP30S | 270                      | 25.4 × 25   | 0.15                  | 1.05               | ELXM251VSN271MQ25S                                 |                    |
|                          | 390         | 25.4 × 25             | 0.15  | 1.26   | ELXM181VSN391MQ25S | 330                      | 22 × 40     | 0.15                  | 1.22               | ELXM251VSN331MP40S                                 |                    |
|                          | 470         | 22 × 35               | 0.15  | 1.42   | ELXM181VSN471MP35S | 330                      | 25.4 × 30   | 0.15                  | 1.19               | ELXM251VSN331MQ30S                                 |                    |
|                          | 470         | 25.4 × 30             | 0.15  | 1.42   | ELXM181VSN471MQ30S | 390                      | 22 × 45     | 0.15                  | 1.36               | ELXM251VSN391MP45S                                 |                    |
|                          | 560         | 22 × 40               | 0.15  | 1.59   | ELXM181VSN561MP40S | 390                      | 25.4 × 35   | 0.15                  | 1.35               | ELXM251VSN391MQ35S                                 |                    |
|                          | 560         | 25.4 × 30             | 0.15  | 1.55   | ELXM181VSN561MQ30S | 390                      | 30 × 25     | 0.15                  | 1.32               | ELXM251VSN391MR25S                                 |                    |
|                          | 560         | 30 × 25               | 0.15  | 1.58   | ELXM181VSN561MR25S | 470                      | 22 × 50     | 0.15                  | 1.49               | ELXM251VSN471MP50S                                 |                    |
|                          | 680         | 22 × 45               | 0.15  | 1.79   | ELXM181VSN681MP45S | 470                      | 25.4 × 40   | 0.15                  | 1.52               | ELXM251VSN471MQ40S                                 |                    |
|                          | 680         | 25.4 × 35             | 0.15  | 1.78   | ELXM181VSN681MQ35S | 470                      | 30 × 30     | 0.15                  | 1.49               | ELXM251VSN471MR30S                                 |                    |
|                          | 680         | 30 × 30               | 0.15  | 1.79   | ELXM181VSN681MR30S | 560                      | 25.4 × 45   | 0.15                  | 1.70               | ELXM251VSN561MQ45S                                 |                    |
|                          | 820         | 25.4 × 40             | 0.15  | 2.01   | ELXM181VSN821MQ40S | 560                      | 30 × 35     | 0.15                  | 1.69               | ELXM251VSN561MR35S                                 |                    |
|                          | 820         | 30 × 35               | 0.15  | 2.04   | ELXM181VSN821MR35S | 680                      | 25.4 × 50   | 0.15                  | 1.91               | ELXM251VSN681MQ50S                                 |                    |
|                          | 1,000       | 25.4 × 50             | 0.15  | 2.32   | ELXM181VSN102MQ50S | 680                      | 30 × 40     | 0.15                  | 1.93               | ELXM251VSN681MR40S                                 |                    |
|                          | 1,000       | 30 × 35               | 0.15  | 2.26   | ELXM181VSN102MR35S | 680                      | 35 × 30     | 0.15                  | 1.90               | ELXM251VSN681MA30S                                 |                    |
|                          | 1,000       | 35 × 30               | 0.15  | 2.30   | ELXM181VSN102MA30S | 820                      | 30 × 45     | 0.15                  | 2.19               | ELXM251VSN821MP45S                                 |                    |
|                          | 1,200       | 30 × 45               | 0.15  | 2.65   | ELXM181VSN122MR45S | 820                      | 35 × 35     | 0.15                  | 2.13               | ELXM251VSN821MA35S                                 |                    |
|                          | 1,200       | 35 × 35               | 0.15  | 2.58   | ELXM181VSN122MA35S | 1,000                    | 35 × 40     | 0.15                  | 2.46               | ELXM251VSN102MA40S                                 |                    |
|                          | 1,500       | 30 × 50               | 0.15  | 3.03   | ELXM181VSN152MR50S | 1,200                    | 35 × 50     | 0.15                  | 2.86               | ELXM251VSN122MA50S                                 |                    |
| 1,500                    | 35 × 40     | 0.15                  | 3.01  | ELXM181VSN152MA40S                                 | 100                | 22 × 25                  | 0.15        | 0.67                  | ELXM3B1VSN101MP25S |  |                    |
| 1,800                    | 35 × 45     | 0.15                  | 3.41  | ELXM181VSN182MA45S                                 | 120                | 22 × 30                  | 0.15        | 0.77                  | ELXM3B1VSN121MP30S |  |                    |
| 2,200                    | 35 × 50     | 0.15                  | 3.87  | ELXM181VSN222MA50S                                 | 150                | 22 × 30                  | 0.15        | 0.86                  | ELXM3B1VSN151MP30S |  |                    |
| 200                      | 220         | 22 × 25               | 0.15  | 0.90   | ELXM201VSN221MP25S | 150                      | 25.4 × 25   | 0.15                  | 0.85               | ELXM3B1VSN151MQ25S                                 |                    |
|                          | 270         | 22 × 30               | 0.15  | 1.05   | ELXM201VSN271MP30S | 180                      | 22 × 35     | 0.15                  | 0.96               | ELXM3B1VSN181MP35S                                 |                    |
|                          | 330         | 22 × 30               | 0.15  | 1.16   | ELXM201VSN331MP30S | 180                      | 25.4 × 30   | 0.15                  | 0.96               | ELXM3B1VSN181MQ30S                                 |                    |
|                          | 330         | 25.4 × 25             | 0.15  | 1.16   | ELXM201VSN331MQ25S | 220                      | 22 × 40     | 0.15                  | 1.09               | ELXM3B1VSN221MP40S                                 |                    |
|                          | 390         | 22 × 35               | 0.15  | 1.29   | ELXM201VSN391MP35S | 220                      | 25.4 × 30   | 0.15                  | 1.06               | ELXM3B1VSN221MQ30S                                 |                    |
|                          | 390         | 25.4 × 30             | 0.15  | 1.29   | ELXM201VSN391MQ30S | 220                      | 30 × 25     | 0.15                  | 1.08               | ELXM3B1VSN221MR25S                                 |                    |
|                          | 470         | 22 × 40               | 0.15  | 1.46   | ELXM201VSN471MP40S | 270                      | 22 × 45     | 0.15                  | 1.24               | ELXM3B1VSN271MP45S                                 |                    |
|                          | 470         | 25.4 × 30             | 0.15  | 1.42   | ELXM201VSN471MQ30S | 270                      | 25.4 × 35   | 0.15                  | 1.23               | ELXM3B1VSN271MQ35S                                 |                    |
|                          | 470         | 30 × 25               | 0.15  | 1.45   | ELXM201VSN471MR25S | 270                      | 30 × 30     | 0.15                  | 1.23               | ELXM3B1VSN271MR30S                                 |                    |
|                          | 560         | 22 × 45               | 0.15  | 1.63   | ELXM201VSN561MP45S | 330                      | 25.4 × 40   | 0.15                  | 1.40               | ELXM3B1VSN331MQ40S                                 |                    |
|                          | 560         | 25.4 × 35             | 0.15  | 1.62   | ELXM201VSN561MQ35S | 330                      | 30 × 35     | 0.15                  | 1.42               | ELXM3B1VSN331MR35S                                 |                    |
|                          | 560         | 30 × 30               | 0.15  | 1.62   | ELXM201VSN561MR30S | 330                      | 35 × 30     | 0.15                  | 1.45               | ELXM3B1VSN331MA30S                                 |                    |
|                          | 680         | 25.4 × 40             | 0.15  | 1.83   | ELXM201VSN681MQ40S | 390                      | 25.4 × 50   | 0.15                  | 1.59               | ELXM3B1VSN391MQ50S                                 |                    |
|                          | 680         | 30 × 30               | 0.15  | 1.79   | ELXM201VSN681MR30S | 390                      | 30 × 35     | 0.15                  | 1.54               | ELXM3B1VSN391MR35S                                 |                    |
|                          | 820         | 25.4 × 45             | 0.15  | 2.06   | ELXM201VSN821MQ45S | 390                      | 35 × 30     | 0.15                  | 1.57               | ELXM3B1VSN391MA30S                                 |                    |
|                          | 820         | 30 × 35               | 0.15  | 2.04   | ELXM201VSN821MR35S | 470                      | 30 × 45     | 0.15                  | 1.81               | ELXM3B1VSN471MR45S                                 |                    |
|                          | 1,000       | 30 × 45               | 0.15  | 2.42   | ELXM201VSN102MR45S | 470                      | 35 × 35     | 0.15                  | 1.77               | ELXM3B1VSN471MA35S                                 |                    |
|                          | 1,000       | 35 × 30               | 0.15  | 2.30   | ELXM201VSN102MA30S | 560                      | 30 × 50     | 0.15                  | 2.03               | ELXM3B1VSN561MR50S                                 |                    |
|                          | 1,200       | 30 × 50               | 0.15  | 2.71   | ELXM201VSN122MR50S | 560                      | 35 × 40     | 0.15                  | 2.02               | ELXM3B1VSN561MA40S                                 |                    |
|                          | 1,200       | 35 × 40               | 0.15  | 2.70   | ELXM201VSN122MA40S | 680                      | 35 × 45     | 0.15                  | 2.29               | ELXM3B1VSN681MA45S                                 |                    |
| 1,500                    | 35 × 45     | 0.15                  | 3.11  | ELXM201VSN152MA45S                                 | 820                | 35 × 50                  | 0.15        | 2.59                  | ELXM3B1VSN821MA50S |  |                    |
| 1,800                    | 35 × 50     | 0.15                  | 3.50  | ELXM201VSN182MA50S                                 |                    |                          |             |                       |                    |  |                    |

◆STANDARD RATINGS

| WV (V <sub>dc</sub> ) | Cap (μF) | Case size φD×L(mm) | tan δ | Rated ripple current (Arms/105°C, 120Hz) | Part No.           | WV (V <sub>dc</sub> ) | Cap (μF) | Case size φD×L(mm) | tan δ              | Rated ripple current (Arms/105°C, 120Hz) | Part No.           |
|-----------------------|----------|--------------------|-------|--|--------------------|-----------------------|----------|--------------------|--------------------|--|--------------------|
| 350                   | 100      | 22 × 25            | 0.15  | 0.67                                     | ELXM351VSN101MP25S | 420                   | 56       | 22 × 25            | 0.20               | 0.50                                     | ELXM421VSN560MP25S |
|                       | 120      | 22 × 30            | 0.15  | 0.77                                     | ELXM351VSN121MP30S |                       | 68       | 22 × 30            | 0.20               | 0.58                                     | ELXM421VSN680MP30S |
|                       | 120      | 25.4 × 25          | 0.15  | 0.76                                     | ELXM351VSN121MQ25S |                       | 82       | 22 × 30            | 0.20               | 0.63                                     | ELXM421VSN820MP30S |
|                       | 150      | 22 × 35            | 0.15  | 0.88                                     | ELXM351VSN151MP35S |                       | 82       | 25.4 × 25          | 0.20               | 0.63                                     | ELXM421VSN820MQ25S |
|                       | 150      | 25.4 × 30          | 0.15  | 0.88                                     | ELXM351VSN151MQ30S |                       | 100      | 22 × 35            | 0.20               | 0.72                                     | ELXM421VSN101MP35S |
|                       | 180      | 22 × 40            | 0.15  | 0.99                                     | ELXM351VSN181MP40S |                       | 100      | 25.4 × 30          | 0.20               | 0.72                                     | ELXM421VSN101MQ30S |
|                       | 180      | 25.4 × 30          | 0.15  | 0.96                                     | ELXM351VSN181MQ30S |                       | 120      | 22 × 40            | 0.20               | 0.81                                     | ELXM421VSN121MP40S |
|                       | 180      | 30 × 25            | 0.15  | 0.98                                     | ELXM351VSN181MR25S |                       | 120      | 25.4 × 30          | 0.20               | 0.79                                     | ELXM421VSN121MQ30S |
|                       | 220      | 22 × 45            | 0.15  | 1.12                                     | ELXM351VSN221MP45S |                       | 120      | 30 × 25            | 0.20               | 0.80                                     | ELXM421VSN121MR25S |
|                       | 220      | 25.4 × 35          | 0.15  | 1.11                                     | ELXM351VSN221MQ35S |                       | 150      | 22 × 45            | 0.20               | 0.92                                     | ELXM421VSN151MP45S |
|                       | 220      | 30 × 30            | 0.15  | 1.11                                     | ELXM351VSN221MR30S |                       | 150      | 25.4 × 35          | 0.20               | 0.92                                     | ELXM421VSN151MQ35S |
|                       | 270      | 25.4 × 40          | 0.15  | 1.26                                     | ELXM351VSN271MQ40S |                       | 150      | 30 × 30            | 0.20               | 0.92                                     | ELXM421VSN151MR30S |
|                       | 270      | 30 × 35            | 0.15  | 1.28                                     | ELXM351VSN271MR35S |                       | 180      | 25.4 × 40          | 0.20               | 1.03                                     | ELXM421VSN181MQ40S |
|                       | 330      | 25.4 × 45          | 0.15  | 1.40                                     | ELXM351VSN331MQ45S |                       | 180      | 30 × 35            | 0.20               | 1.05                                     | ELXM421VSN181MR35S |
|                       | 330      | 30 × 35            | 0.15  | 1.42                                     | ELXM351VSN331MR35S |                       | 220      | 25.4 × 50          | 0.20               | 1.19                                     | ELXM421VSN221MP50S |
|                       | 330      | 35 × 30            | 0.15  | 1.45                                     | ELXM351VSN331MA30S |                       | 220      | 30 × 35            | 0.20               | 1.16                                     | ELXM421VSN221MR35S |
|                       | 390      | 30 × 40            | 0.15  | 1.60                                     | ELXM351VSN391MR40S |                       | 220      | 35 × 30            | 0.20               | 1.18                                     | ELXM421VSN221MA30S |
|                       | 390      | 35 × 35            | 0.15  | 1.61                                     | ELXM351VSN391MA35S |                       | 270      | 30 × 45            | 0.20               | 1.38                                     | ELXM421VSN271MR45S |
|                       | 470      | 30 × 50            | 0.15  | 1.86                                     | ELXM351VSN471MR50S |                       | 270      | 35 × 35            | 0.20               | 1.34                                     | ELXM421VSN271MA35S |
|                       | 470      | 35 × 40            | 0.15  | 1.85                                     | ELXM351VSN471MA40S |                       | 330      | 30 × 50            | 0.20               | 1.56                                     | ELXM421VSN331MR50S |
| 560                   | 35 × 40  | 0.15               | 2.02  | ELXM351VSN561MA40S                       | 330                | 35 × 40               | 0.20     | 1.55               | ELXM421VSN331MA40S |  |                    |
| 680                   | 35 × 50  | 0.15               | 2.36  | ELXM351VSN681MA50S                       | 390                | 35 × 45               | 0.20     | 1.74               | ELXM421VSN391MA45S |  |                    |
| 400                   | 68       | 22 × 25            | 0.15  | 0.55                                     | ELXM401VSN680MP25S | 470                   | 35 × 50  | 0.20               | 1.96               | ELXM421VSN471MA50S                       |                    |
|                       | 82       | 22 × 30            | 0.15  | 0.63                                     | ELXM401VSN820MP30S | 450                   | 47       | 22 × 25            | 0.20               | 0.46                                     | ELXM451VSN470MP25S |
|                       | 100      | 22 × 30            | 0.15  | 0.70                                     | ELXM401VSN101MP30S |                       | 56       | 22 × 30            | 0.20               | 0.52                                     | ELXM451VSN560MP30S |
|                       | 100      | 25.4 × 25          | 0.15  | 0.70                                     | ELXM401VSN101MQ25S |                       | 68       | 22 × 30            | 0.20               | 0.58                                     | ELXM451VSN680MP30S |
|                       | 120      | 22 × 35            | 0.15  | 0.79                                     | ELXM401VSN121MP35S |                       | 68       | 25.4 × 25          | 0.20               | 0.58                                     | ELXM451VSN680MQ25S |
|                       | 120      | 25.4 × 30          | 0.15  | 0.79                                     | ELXM401VSN121MQ30S |                       | 82       | 22 × 35            | 0.20               | 0.65                                     | ELXM451VSN820MP35S |
|                       | 150      | 22 × 40            | 0.15  | 0.90                                     | ELXM401VSN151MP40S |                       | 82       | 25.4 × 30          | 0.20               | 0.65                                     | ELXM451VSN820MQ30S |
|                       | 150      | 25.4 × 30          | 0.15  | 0.88                                     | ELXM401VSN151MQ30S |                       | 100      | 22 × 40            | 0.20               | 0.74                                     | ELXM451VSN101MP40S |
|                       | 150      | 30 × 25            | 0.15  | 0.90                                     | ELXM401VSN151MR25S |                       | 100      | 25.4 × 30          | 0.20               | 0.72                                     | ELXM451VSN101MQ30S |
|                       | 180      | 22 × 45            | 0.15  | 0.99                                     | ELXM401VSN181MP45S |                       | 100      | 30 × 25            | 0.20               | 0.73                                     | ELXM451VSN101MR25S |
|                       | 180      | 25.4 × 35          | 0.15  | 1.01                                     | ELXM401VSN181MQ35S |                       | 120      | 22 × 45            | 0.20               | 0.83                                     | ELXM451VSN121MP45S |
|                       | 180      | 30 × 30            | 0.15  | 1.01                                     | ELXM401VSN181MR30S |                       | 120      | 25.4 × 35          | 0.20               | 0.82                                     | ELXM451VSN121MQ35S |
|                       | 220      | 25.4 × 40          | 0.15  | 1.14                                     | ELXM401VSN221MQ40S |                       | 120      | 30 × 30            | 0.20               | 0.82                                     | ELXM451VSN121MR30S |
|                       | 220      | 30 × 35            | 0.15  | 1.16                                     | ELXM401VSN221MR35S |                       | 150      | 25.4 × 40          | 0.20               | 0.94                                     | ELXM451VSN151MQ40S |
|                       | 270      | 25.4 × 50          | 0.15  | 1.32                                     | ELXM401VSN271MQ50S |                       | 150      | 30 × 35            | 0.20               | 0.96                                     | ELXM451VSN151MR35S |
|                       | 270      | 30 × 40            | 0.15  | 1.33                                     | ELXM401VSN271MR40S |                       | 180      | 25.4 × 45          | 0.20               | 1.06                                     | ELXM451VSN181MQ45S |
|                       | 270      | 35 × 30            | 0.15  | 1.31                                     | ELXM401VSN271MA30S |                       | 180      | 30 × 35            | 0.20               | 1.05                                     | ELXM451VSN181MR35S |
|                       | 330      | 30 × 45            | 0.15  | 1.52                                     | ELXM401VSN331MR45S |                       | 180      | 35 × 30            | 0.20               | 1.07                                     | ELXM451VSN181MA30S |
|                       | 330      | 35 × 35            | 0.15  | 1.48                                     | ELXM401VSN331MA35S |                       | 220      | 30 × 40            | 0.20               | 1.20                                     | ELXM451VSN221MR40S |
|                       | 390      | 30 × 50            | 0.15  | 1.69                                     | ELXM401VSN391MR50S |                       | 220      | 35 × 35            | 0.20               | 1.21                                     | ELXM451VSN221MA35S |
| 390                   | 35 × 40  | 0.15               | 1.68  | ELXM401VSN391MA40S                       | 270                |                       | 30 × 50  | 0.20               | 1.41               | ELXM451VSN271MR50S                       |                    |
| 470                   | 35 × 45  | 0.15               | 1.91  | ELXM401VSN471MA45S                       | 270                | 35 × 40               | 0.20     | 1.40               | ELXM451VSN271MA40S |  |                    |
| 560                   | 35 × 50  | 0.15               | 2.14  | ELXM401VSN561MA50S                       | 330                | 35 × 45               | 0.20     | 1.60               | ELXM451VSN331MA45S |  |                    |
|                       |          |                    |       |  | 390                | 35 × 50               | 0.20     | 1.79               | ELXM451VSN391MA50S |  |                    |

◆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 |

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.