

SMH Series

- Endurance with ripple current : 2,000 hours at 85°C
- Non solvent resistant type
- RoHS2 Compliant

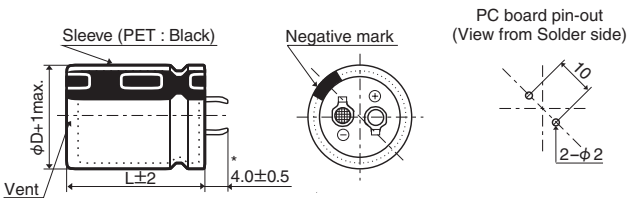


◆ SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | |
|--|--|---------------------------------------|------|------|------|------|------|------|------|------|------------------|
| Category | -40 to +85°C | | | | | | | | | | |
| Temperature Range | -40 to +85°C | | | | | | | | | | |
| Rated Voltage Range | 6.3 to 100V _{dc} | | | | | | | | | | |
| Capacitance Tolerance | ±20% (M) (at 20°C, 120Hz) | | | | | | | | | | |
| Leakage Current | I=0.02CV or 3mA, whichever is smaller. Where, I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (V) (at 20°C after 5 minutes) | | | | | | | | | | |
| Dissipation Factor (tan δ) | Rated voltage (V _{dc}) | 6.3V | 10V | 16V | 25V | 35V | 50V | 63V | 80V | 100V | |
| | tan δ (Max.) | 0.60 | 0.50 | 0.40 | 0.30 | 0.25 | 0.20 | 0.15 | 0.15 | 0.15 | (at 20°C, 120Hz) |
| Low Temperature Characteristics (Max. Impedance Ratio) | Rated voltage (V _{dc}) | 6.3V | 10V | 16V | 25V | 35V | 50V | 63V | 80V | 100V | |
| | Z(-25°C)/Z(+20°C) | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | |
| | Z(-40°C)/Z(+20°C) | 15 | 15 | 15 | 10 | 8 | 6 | 6 | 5 | 5 | (at 120Hz) |
| Endurance | The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 2,000 hours at 85°C. | | | | | | | | | | |
| | 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°C after exposing them for 1,000 hours at 85°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 | ≤ ±20% of the initial value | | | | | | | | | |
| | D.F. (tan δ) | ≤ 150% of the initial specified value | | | | | | | | | |
| | Leakage current | ≤ The initial specified value | | | | | | | | | |

◆ DIMENSIONS [mm]

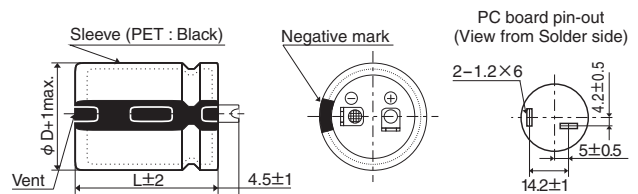
● Terminal Code : VS (φ22 to φ35) : Standard



*φD=35mm : 3.5±0.5mm

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 (V _{dc}) | Cap (μF) | Case size φD×L(mm) | tan δ | Rated ripple current (Arms/85°C, 120Hz) | Part No. | WV (V _{dc}) | Cap (μF) | Case size φD×L(mm) | tan δ | Rated ripple current (Arms/85°C, 120Hz) | Part No. | | |
|-----------------------|----------|--------------------|---------|---|--------------------|-----------------------|--------------------|--------------------|-----------|---|--------------------|--------------------|--------------------|
| 6.3 | 15,000 | 22 × 25 | 0.60 | 2.44 | ESMH6R3VSN153MP25S | 16 | 27,000 | 25.4 × 45 | 0.40 | 4.72 | ESMH160VSN273MQ45S | | |
| | 18,000 | 22 × 30 | 0.60 | 2.67 | ESMH6R3VSN183MP30S | | 27,000 | 30 × 35 | 0.40 | 4.82 | ESMH160VSN273MR35S | | |
| | 18,000 | 25.4 × 25 | 0.60 | 2.70 | ESMH6R3VSN183MQ25S | | 27,000 | 35 × 30 | 0.40 | 4.65 | ESMH160VSN273MA30S | | |
| | 22,000 | 22 × 30 | 0.60 | 3.06 | ESMH6R3VSN223MP30S | | 33,000 | 25.4 × 50 | 0.40 | 5.33 | ESMH160VSN333MQ50S | | |
| | 22,000 | 25.4 × 25 | 0.60 | 3.07 | ESMH6R3VSN223MQ25S | | 33,000 | 30 × 40 | 0.40 | 5.36 | ESMH160VSN333MR40S | | |
| | 27,000 | 22 × 35 | 0.60 | 3.49 | ESMH6R3VSN273MP35S | | 33,000 | 35 × 30 | 0.40 | 5.15 | ESMH160VSN333MA30S | | |
| | 27,000 | 25.4 × 30 | 0.60 | 3.52 | ESMH6R3VSN273MQ30S | | 39,000 | 30 × 45 | 0.40 | 6.01 | ESMH160VSN393MR45S | | |
| | 27,000 | 30 × 25 | 0.60 | 3.57 | ESMH6R3VSN273MR25S | | 39,000 | 35 × 35 | 0.40 | 5.95 | ESMH160VSN393MA35S | | |
| | 33,000 | 22 × 40 | 0.60 | 3.97 | ESMH6R3VSN333MP40S | | 47,000 | 30 × 50 | 0.40 | 6.79 | ESMH160VSN473MR50S | | |
| | 33,000 | 25.4 × 35 | 0.60 | 4.02 | ESMH6R3VSN333MQ35S | | 47,000 | 35 × 40 | 0.40 | 6.76 | ESMH160VSN473MA40S | | |
| | 33,000 | 30 × 25 | 0.60 | 3.95 | ESMH6R3VSN333MQ25S | | 56,000 | 35 × 45 | 0.40 | 7.62 | ESMH160VSN563MA45S | | |
| | 39,000 | 22 × 50 | 0.60 | 4.55 | ESMH6R3VSN393MP50S | | 68,000 | 35 × 50 | 0.40 | 8.63 | ESMH160VSN683MA50S | | |
| | 39,000 | 25.4 × 40 | 0.60 | 4.50 | ESMH6R3VSN393MQ40S | | 25 | 5,600 | 22 × 25 | 0.30 | 2.21 | ESMH250VSN562MP25S | |
| | 39,000 | 30 × 30 | 0.60 | 4.45 | ESMH6R3VSN393MR30S | | | 6,800 | 22 × 30 | 0.30 | 2.40 | ESMH250VSN682MP30S | |
| | 39,000 | 35 × 25 | 0.60 | 4.51 | ESMH6R3VSN393MA25S | | | 6,800 | 25.4 × 25 | 0.30 | 2.56 | ESMH250VSN682MQ25S | |
| | 47,000 | 25.4 × 45 | 0.60 | 5.09 | ESMH6R3VSN473MQ45S | | | 8,200 | 22 × 35 | 0.30 | 2.72 | ESMH250VSN822MP35S | |
| | 47,000 | 30 × 35 | 0.60 | 5.06 | ESMH6R3VSN473MR35S | | | 8,200 | 25.4 × 25 | 0.30 | 2.80 | ESMH250VSN822MQ25S | |
| | 47,000 | 35 × 30 | 0.60 | 5.01 | ESMH6R3VSN473MA30S | | | 10,000 | 22 × 40 | 0.30 | 3.09 | ESMH250VSN103MP40S | |
| | 56,000 | 25.4 × 50 | 0.60 | 5.71 | ESMH6R3VSN563MQ50S | | | 10,000 | 25.4 × 30 | 0.30 | 3.12 | ESMH250VSN103MQ30S | |
| | 56,000 | 30 × 40 | 0.60 | 5.70 | ESMH6R3VSN563MR40S | | | 10,000 | 30 × 25 | 0.30 | 3.21 | ESMH250VSN103MR25S | |
| | 56,000 | 35 × 30 | 0.60 | 5.77 | ESMH6R3VSN563MA30S | | | 12,000 | 22 × 45 | 0.30 | 3.48 | ESMH250VSN123MP45S | |
| | 68,000 | 30 × 45 | 0.60 | 6.48 | ESMH6R3VSN683MR45S | | | 12,000 | 25.4 × 35 | 0.30 | 3.43 | ESMH250VSN123MQ35S | |
| | 68,000 | 35 × 35 | 0.60 | 6.42 | ESMH6R3VSN683MA35S | | | 12,000 | 30 × 30 | 0.30 | 3.86 | ESMH250VSN123MR30S | |
| | 82,000 | 30 × 50 | 0.60 | 7.32 | ESMH6R3VSN823MR50S | | | 12,000 | 35 × 25 | 0.30 | 3.54 | ESMH250VSN123MA25S | |
| | 82,000 | 35 × 40 | 0.60 | 7.29 | ESMH6R3VSN823MA40S | | | 15,000 | 22 × 50 | 0.30 | 4.00 | ESMH250VSN153MP50S | |
| | 100,000 | 35 × 45 | 0.60 | 8.31 | ESMH6R3VSN104MA45S | | | 15,000 | 25.4 × 40 | 0.30 | 3.95 | ESMH250VSN153MQ40S | |
| | 10 | 12,000 | 22 × 25 | 0.50 | 2.39 | | | ESMH100VSN123MP25S | 15,000 | 30 × 30 | 0.30 | 4.00 | ESMH250VSN153MR30S |
| | | 15,000 | 22 × 30 | 0.50 | 2.76 | | | ESMH100VSN153MP30S | 15,000 | 35 × 25 | 0.30 | 3.95 | ESMH250VSN153MA25S |
| 15,000 | | 25.4 × 25 | 0.50 | 2.77 | ESMH100VSN153MQ25S | 18,000 | | 25.4 × 45 | 0.30 | 4.45 | ESMH250VSN183MQ45S | | |
| 18,000 | | 22 × 35 | 0.50 | 3.12 | ESMH100VSN183MP35S | 18,000 | | 30 × 35 | 0.30 | 4.46 | ESMH250VSN183MR35S | | |
| 18,000 | | 25.4 × 25 | 0.50 | 3.04 | ESMH100VSN183MQ25S | 18,000 | | 35 × 30 | 0.30 | 4.63 | ESMH250VSN183MA30S | | |
| 22,000 | | 22 × 40 | 0.50 | 3.55 | ESMH100VSN223MP40S | 22,000 | | 25.4 × 50 | 0.30 | 5.02 | ESMH250VSN223MQ50S | | |
| 22,000 | | 25.4 × 30 | 0.50 | 3.48 | ESMH100VSN223MQ30S | 22,000 | | 30 × 45 | 0.30 | 5.21 | ESMH250VSN223MR45S | | |
| 22,000 | | 30 × 25 | 0.50 | 3.53 | ESMH100VSN223MR25S | 22,000 | | 35 × 35 | 0.30 | 5.16 | ESMH250VSN223MA35S | | |
| 27,000 | | 22 × 45 | 0.50 | 4.04 | ESMH100VSN273MP45S | 27,000 | | 30 × 50 | 0.30 | 5.94 | ESMH250VSN273MR50S | | |
| 27,000 | | 25.4 × 35 | 0.50 | 3.98 | ESMH100VSN273MQ35S | 27,000 | | 35 × 40 | 0.30 | 5.92 | ESMH250VSN273MA40S | | |
| 27,000 | | 30 × 30 | 0.50 | 3.73 | ESMH100VSN273MR30S | 33,000 | | 35 × 45 | 0.30 | 6.75 | ESMH250VSN333MA45S | | |
| 27,000 | | 35 × 25 | 0.50 | 3.73 | ESMH100VSN273MA25S | 39,000 | | 35 × 50 | 0.30 | 7.56 | ESMH250VSN393MA50S | | |
| 33,000 | | 22 × 50 | 0.50 | 4.58 | ESMH100VSN333MP50S | 35 | | 3,900 | 22 × 25 | 0.25 | 2.22 | ESMH350VSN392MP25S | |
| 33,000 | | 25.4 × 40 | 0.50 | 4.54 | ESMH100VSN333MQ40S | | | 4,700 | 22 × 30 | 0.25 | 2.41 | ESMH350VSN472MP30S | |
| 33,000 | | 30 × 30 | 0.50 | 4.13 | ESMH100VSN333MR30S | | 4,700 | 25.4 × 25 | 0.25 | 2.42 | ESMH350VSN472MQ25S | | |
| 33,000 | | 35 × 25 | 0.50 | 4.13 | ESMH100VSN333MA25S | | 5,600 | 22 × 35 | 0.25 | 2.75 | ESMH350VSN562MP35S | | |
| 39,000 | | 25.4 × 45 | 0.50 | 5.08 | ESMH100VSN393MQ45S | | 5,600 | 25.4 × 25 | 0.25 | 2.64 | ESMH350VSN562MQ25S | | |
| 39,000 | | 30 × 35 | 0.50 | 5.05 | ESMH100VSN393MR35S | | 6,800 | 22 × 40 | 0.25 | 2.80 | ESMH350VSN682MP40S | | |
| 39,000 | | 35 × 30 | 0.50 | 4.80 | ESMH100VSN393MA30S | | 6,800 | 25.4 × 30 | 0.25 | 2.74 | ESMH350VSN682MQ30S | | |
| 47,000 | | 25.4 × 50 | 0.50 | 5.73 | ESMH100VSN473MQ50S | | 6,800 | 30 × 25 | 0.25 | 2.97 | ESMH350VSN682MR25S | | |
| 47,000 | | 30 × 40 | 0.50 | 5.72 | ESMH100VSN473MR40S | | 8,200 | 22 × 45 | 0.25 | 3.47 | ESMH350VSN822MP45S | | |
| 47,000 | | 35 × 30 | 0.50 | 5.27 | ESMH100VSN473MA30S | | 8,200 | 25.4 × 35 | 0.25 | 3.10 | ESMH350VSN822MQ35S | | |
| 56,000 | | 30 × 45 | 0.50 | 6.44 | ESMH100VSN563MR45S | | 8,200 | 30 × 30 | 0.25 | 3.13 | ESMH350VSN822MR30S | | |
| 56,000 | | 35 × 35 | 0.50 | 6.38 | ESMH100VSN563MA35S | | 8,200 | 35 × 25 | 0.25 | 2.73 | ESMH350VSN822MA25S | | |
| 68,000 | | 30 × 50 | 0.50 | 7.27 | ESMH100VSN683MR50S | | 10,000 | 22 × 50 | 0.25 | 3.57 | ESMH350VSN103MP50S | | |
| 68,000 | | 35 × 40 | 0.50 | 7.27 | ESMH100VSN683MA40S | | 10,000 | 25.4 × 40 | 0.25 | 3.53 | ESMH350VSN103MQ40S | | |
| 82,000 | | 35 × 50 | 0.50 | 8.49 | ESMH100VSN823MA50S | | 10,000 | 30 × 30 | 0.25 | 3.46 | ESMH350VSN103MR30S | | |
| 16 | | 8,200 | 22 × 25 | 0.40 | 2.51 | | ESMH160VSN822MP25S | 10,000 | 35 × 25 | 0.25 | 3.02 | ESMH350VSN103MA25S | |
| | 10,000 | 22 × 25 | 0.40 | 2.77 | ESMH160VSN103MP25S | | 12,000 | 25.4 × 45 | 0.25 | 3.98 | ESMH350VSN123MQ45S | | |
| | 12,000 | 22 × 30 | 0.40 | 2.86 | ESMH160VSN103MP30S | | 12,000 | 30 × 35 | 0.25 | 4.01 | ESMH350VSN123MR35S | | |
| | 12,000 | 25.4 × 25 | 0.40 | 2.95 | ESMH160VSN123MQ25S | | 12,000 | 35 × 30 | 0.25 | 4.42 | ESMH350VSN123MA30S | | |
| | 15,000 | 22 × 35 | 0.40 | 3.29 | ESMH160VSN153MP35S | | 15,000 | 25.4 × 50 | 0.25 | 4.54 | ESMH350VSN153MQ50S | | |
| | 15,000 | 25.4 × 30 | 0.40 | 3.46 | ESMH160VSN153MQ30S | | 15,000 | 30 × 40 | 0.25 | 4.52 | ESMH350VSN153MR40S | | |
| | 15,000 | 30 × 25 | 0.40 | 3.66 | ESMH160VSN153MR25S | | 15,000 | 35 × 35 | 0.25 | 5.01 | ESMH350VSN153MA35S | | |
| | 18,000 | 22 × 40 | 0.40 | 3.72 | ESMH160VSN183MP40S | | 18,000 | 30 × 45 | 0.25 | 4.71 | ESMH350VSN183MR45S | | |
| | 18,000 | 25.4 × 35 | 0.40 | 3.98 | ESMH160VSN183MQ35S | | 18,000 | 35 × 40 | 0.25 | 5.54 | ESMH350VSN183MA40S | | |
| | 18,000 | 30 × 25 | 0.40 | 4.00 | ESMH160VSN183MR25S | | 22,000 | 30 × 50 | 0.25 | 5.33 | ESMH350VSN223MR50S | | |
| | 22,000 | 22 × 50 | 0.40 | 4.37 | ESMH160VSN223MP50S | | 22,000 | 35 × 45 | 0.25 | 6.04 | ESMH350VSN223MA45S | | |
| | 22,000 | 25.4 × 40 | 0.40 | 4.26 | ESMH160VSN223MQ40S | | 27,000 | 35 × 50 | 0.25 | 6.89 | ESMH350VSN273MA50S | | |
| | 22,000 | 30 × 30 | 0.40 | 4.21 | ESMH160VSN223MR30S | | 50 | 2,200 | 22 × 25 | 0.20 | 1.91 | ESMH500VSN222MP25S | |
| | 22,000 | 35 × 25 | 0.40 | 4.15 | ESMH160VSN223MA25S | 3,300 | | 22 × 30 | 0.20 | 2.37 | ESMH500VSN332MP30S | | |

◆STANDARD RATINGS

| WV (V _{dc}) | Cap (μF) | Case size φD×L(mm) | tan δ | Rated ripple current (Arms/ 85°C, 120Hz) | Part No. | WV (V _{dc}) | Cap (μF) | Case size φD×L(mm) | tan δ | Rated ripple current (Arms/ 85°C, 120Hz) | Part No. |
|--------------------------|-------------|-----------------------|-------|---|--------------------|--------------------------|-------------|-----------------------|--------------------|---|--------------------|
| | | | | | | | | | | | |
| 50 | 3,300 | 25.4 × 25 | 0.20 | 2.38 | ESMH500VSN332MQ25S | 80 | 1,200 | 22 × 25 | 0.15 | 1.69 | ESMH800VSN122MP25S |
| | 3,900 | 22 × 35 | 0.20 | 2.65 | ESMH500VSN392MP35S | | 1,500 | 22 × 25 | 0.15 | 1.88 | ESMH800VSN152MP25S |
| | 3,900 | 25.4 × 30 | 0.20 | 2.68 | ESMH500VSN392MQ30S | | 1,800 | 22 × 30 | 0.15 | 2.14 | ESMH800VSN182MP30S |
| | 3,900 | 30 × 25 | 0.20 | 2.55 | ESMH500VSN392MR25S | | 1,800 | 25.4 × 25 | 0.15 | 2.26 | ESMH800VSN182MQ25S |
| | 4,700 | 22 × 40 | 0.20 | 2.99 | ESMH500VSN472MP40S | | 2,200 | 22 × 35 | 0.15 | 2.44 | ESMH800VSN222MP35S |
| | 4,700 | 25.4 × 35 | 0.20 | 3.03 | ESMH500VSN472MQ35S | | 2,200 | 25.4 × 30 | 0.15 | 2.46 | ESMH800VSN222MQ30S |
| | 4,700 | 30 × 25 | 0.20 | 2.81 | ESMH500VSN472MR25S | | 2,200 | 30 × 25 | 0.15 | 2.49 | ESMH800VSN222MR25S |
| | 5,600 | 22 × 45 | 0.20 | 3.36 | ESMH500VSN562MP45S | | 2,700 | 22 × 40 | 0.15 | 2.78 | ESMH800VSN272MP40S |
| | 5,600 | 25.4 × 35 | 0.20 | 3.31 | ESMH500VSN562MQ35S | | 2,700 | 25.4 × 35 | 0.15 | 2.81 | ESMH800VSN272MQ35S |
| | 5,600 | 30 × 30 | 0.20 | 3.37 | ESMH500VSN562MR30S | | 2,700 | 30 × 25 | 0.15 | 2.75 | ESMH800VSN272MR25S |
| | 5,600 | 35 × 25 | 0.20 | 3.42 | ESMH500VSN562MA25S | | 3,300 | 22 × 45 | 0.15 | 3.16 | ESMH800VSN332MP45S |
| | 6,800 | 22 × 50 | 0.20 | 3.81 | ESMH500VSN682MP50S | | 3,300 | 25.4 × 40 | 0.15 | 3.21 | ESMH800VSN332MQ40S |
| | 6,800 | 25.4 × 40 | 0.20 | 3.81 | ESMH500VSN682MQ40S | | 3,300 | 30 × 30 | 0.15 | 3.17 | ESMH800VSN332MR30S |
| | 6,800 | 30 × 35 | 0.20 | 3.85 | ESMH500VSN682MR35S | | 3,300 | 35 × 25 | 0.15 | 3.21 | ESMH800VSN332MA25S |
| | 6,800 | 35 × 30 | 0.20 | 3.85 | ESMH500VSN682MA30S | | 3,900 | 22 × 50 | 0.15 | 3.52 | ESMH800VSN392MP50S |
| | 8,200 | 25.4 × 50 | 0.20 | 4.37 | ESMH500VSN822MQ50S | | 3,900 | 25.4 × 45 | 0.15 | 3.59 | ESMH800VSN392MQ45S |
| | 8,200 | 30 × 40 | 0.20 | 4.36 | ESMH500VSN822MR40S | | 3,900 | 30 × 35 | 0.15 | 3.57 | ESMH800VSN392MR35S |
| | 8,200 | 35 × 30 | 0.20 | 4.41 | ESMH500VSN822MA30S | | 3,900 | 35 × 25 | 0.15 | 3.50 | ESMH800VSN392MA25S |
| 10,000 | 30 × 45 | 0.20 | 4.97 | ESMH500VSN103MR45S | 4,700 | 25.4 × 50 | 0.15 | 4.05 | ESMH800VSN472MQ50S | | |
| 10,000 | 35 × 35 | 0.20 | 4.92 | ESMH500VSN103MA35S | 4,700 | 30 × 40 | 0.15 | 4.05 | ESMH800VSN472MR40S | | |
| 12,000 | 30 × 50 | 0.20 | 5.60 | ESMH500VSN123MR50S | 4,700 | 35 × 30 | 0.15 | 4.09 | ESMH800VSN472MA30S | | |
| 12,000 | 35 × 40 | 0.20 | 5.58 | ESMH500VSN123MA40S | 5,600 | 30 × 45 | 0.15 | 4.55 | ESMH800VSN562MR45S | | |
| 15,000 | 35 × 45 | 0.20 | 6.44 | ESMH500VSN153MA45S | 5,600 | 35 × 35 | 0.15 | 4.51 | ESMH800VSN562MA35S | | |
| 18,000 | 35 × 50 | 0.20 | 6.71 | ESMH500VSN183MA50S | 6,800 | 30 × 50 | 0.15 | 5.16 | ESMH800VSN682MR50S | | |
| 63 | 1,800 | 22 × 25 | 0.15 | 1.82 | ESMH630VSN182MP25S | 6,800 | 35 × 40 | 0.15 | 5.14 | ESMH800VSN682MA40S | |
| | 2,200 | 22 × 30 | 0.15 | 2.31 | ESMH630VSN222MP30S | 8,200 | 35 × 45 | 0.15 | 5.83 | ESMH800VSN822MA45S | |
| | 2,200 | 25.4 × 25 | 0.15 | 2.30 | ESMH630VSN222MQ25S | 10,000 | 35 × 50 | 0.15 | 6.63 | ESMH800VSN103MA50S | |
| | 2,700 | 22 × 35 | 0.15 | 2.40 | ESMH630VSN272MP35S | 100 | 820 | 22 × 25 | 0.15 | 1.86 | ESMH101VSN821MP25S |
| | 2,700 | 25.4 × 25 | 0.15 | 2.40 | ESMH630VSN272MQ25S | | 1,200 | 22 × 30 | 0.15 | 2.09 | ESMH101VSN122MP30S |
| | 3,300 | 22 × 35 | 0.15 | 2.62 | ESMH630VSN332MP35S | | 1,200 | 25.4 × 25 | 0.15 | 2.10 | ESMH101VSN122MQ25S |
| | 3,300 | 25.4 × 30 | 0.15 | 2.64 | ESMH630VSN332MQ30S | | 1,500 | 22 × 35 | 0.15 | 2.41 | ESMH101VSN152MP35S |
| | 3,300 | 30 × 25 | 0.15 | 2.78 | ESMH630VSN332MR25S | | 1,500 | 25.4 × 30 | 0.15 | 2.43 | ESMH101VSN152MQ30S |
| | 3,900 | 22 × 40 | 0.15 | 2.93 | ESMH630VSN392MP40S | | 1,500 | 30 × 25 | 0.15 | 2.46 | ESMH101VSN152MR25S |
| | 3,900 | 25.4 × 35 | 0.15 | 2.97 | ESMH630VSN392MQ35S | | 1,800 | 22 × 40 | 0.15 | 2.71 | ESMH101VSN182MP40S |
| | 3,900 | 30 × 30 | 0.15 | 3.00 | ESMH630VSN392MR30S | | 1,800 | 25.4 × 35 | 0.15 | 2.75 | ESMH101VSN182MQ35S |
| | 3,900 | 35 × 25 | 0.15 | 3.00 | ESMH630VSN392MA25S | | 1,800 | 30 × 25 | 0.15 | 2.72 | ESMH101VSN182MR25S |
| | 4,700 | 22 × 50 | 0.15 | 3.39 | ESMH630VSN472MP50S | | 2,200 | 22 × 45 | 0.15 | 3.08 | ESMH101VSN222MP45S |
| | 4,700 | 25.4 × 40 | 0.15 | 3.36 | ESMH630VSN472MQ40S | | 2,200 | 25.4 × 40 | 0.15 | 3.13 | ESMH101VSN222MQ40S |
| | 4,700 | 30 × 30 | 0.15 | 3.32 | ESMH630VSN472MR30S | | 2,200 | 30 × 30 | 0.15 | 3.09 | ESMH101VSN222MR30S |
| | 4,700 | 35 × 25 | 0.15 | 3.36 | ESMH630VSN472MA25S | | 2,200 | 35 × 25 | 0.15 | 3.14 | ESMH101VSN222MA25S |
| | 5,600 | 25.4 × 45 | 0.15 | 3.77 | ESMH630VSN562MQ45S | | 2,700 | 22 × 50 | 0.15 | 3.53 | ESMH101VSN272MP50S |
| | 5,600 | 30 × 35 | 0.15 | 3.75 | ESMH630VSN562MR35S | | 2,700 | 25.4 × 45 | 0.15 | 3.57 | ESMH101VSN272MQ45S |
| | 5,600 | 35 × 30 | 0.15 | 3.76 | ESMH630VSN562MA30S | | 2,700 | 30 × 35 | 0.15 | 3.55 | ESMH101VSN272MR35S |
| | 6,800 | 25.4 × 50 | 0.15 | 4.27 | ESMH630VSN682MQ50S | | 2,700 | 35 × 30 | 0.15 | 3.71 | ESMH101VSN272MA30S |
| | 6,800 | 30 × 40 | 0.15 | 4.27 | ESMH630VSN682MR40S | | 3,300 | 25.4 × 50 | 0.15 | 4.06 | ESMH101VSN332MQ50S |
| | 6,800 | 35 × 30 | 0.15 | 4.15 | ESMH630VSN682MA30S | | 3,300 | 30 × 40 | 0.15 | 4.05 | ESMH101VSN332MR40S |
| | 8,200 | 30 × 45 | 0.15 | 4.83 | ESMH630VSN822MR45S | | 3,300 | 35 × 30 | 0.15 | 4.05 | ESMH101VSN332MA30S |
| | 8,200 | 35 × 35 | 0.15 | 4.79 | ESMH630VSN822MA35S | | 3,900 | 30 × 45 | 0.15 | 4.54 | ESMH101VSN392MR45S |
| 10,000 | 30 × 50 | 0.15 | 5.49 | ESMH630VSN103MR50S | 3,900 | | 35 × 35 | 0.15 | 4.49 | ESMH101VSN392MA35S | |
| 10,000 | 35 × 40 | 0.15 | 5.47 | ESMH630VSN103MA40S | 4,700 | | 30 × 50 | 0.15 | 5.13 | ESMH101VSN472MR50S | |
| 12,000 | 35 × 45 | 0.15 | 6.19 | ESMH630VSN123MA45S | 4,700 | | 35 × 40 | 0.15 | 5.11 | ESMH101VSN472MA40S | |
| | | | | | 5,600 | 35 × 45 | 0.15 | 5.75 | ESMH101VSN562MA45S | | |
| | | | | | 6,800 | 35 × 50 | 0.15 | 6.50 | ESMH101VSN682MA50S | | |

*For the rated voltage $\geq 160V_{dc}$, please use SMQ series

◆RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

| Frequency(Hz) | 50 | 120 | 300 | 1k | 10k | 50k |
|--------------------------|------|------|------|------|------|------|
| 6.3 to 50V _{dc} | 0.95 | 1.00 | 1.03 | 1.05 | 1.08 | 1.08 |
| 63 to 100V _{dc} | 0.92 | 1.00 | 1.07 | 1.13 | 1.19 | 1.20 |

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.