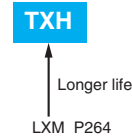


TXH Series

- Endurance with ripple current : 10,000 hours at 105°C
- Non solvent resistant type
- RoHS Compliant



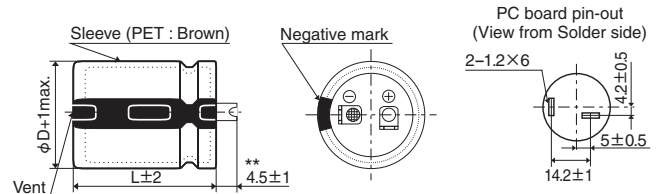
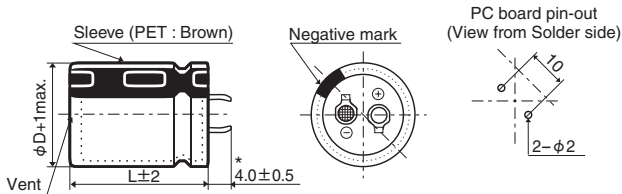
SPECIFICATIONS

| Items | Characteristics | | |
|--|---|---------------------------------------|------|
| Category | -25 to +105°C | | |
| Temperature Range | -25 to +105°C | | |
| Rated Voltage Range | 200 to 450V _{dc} | | |
| Capacitance Tolerance | ±20% (M) (at 20°C, 120Hz) | | |
| Leakage Current | I ≤ 3√CV 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}) | 200 to 400V | 450V |
| | tan δ (Max.) | 0.15 | 0.20 |
| Low Temperature Characteristics (Max. Impedance Ratio) | Rated voltage (V _{dc}) | 200 to 400V | 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 10,000 hours at 105°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 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 (φ30 to φ40) : Standard

Terminal Code : LI (φ35, φ40)



* φD=40mm : 3.5 ± 0.5mm

** φD=40mm : 4.0 ± 1

The standard design has no plastic disc.

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/105°C, 120Hz) | Part No. | WV (V _{dc}) | Cap (μF) | Case size φD×L(mm) | tan δ | Rated ripple current (Arms/105°C, 120Hz) | Part No. |
|-----------------------|----------|--------------------|-------|--|--------------------|-----------------------|----------|--------------------|-------|--|--------------------|
| 200 | 560 | 30 × 30 | 0.15 | 1.50 | ETXH201VSN561MR30S | 400 | 220 | 30 × 35 | 0.15 | 1.00 | ETXH401VSN221MR35S |
| | 680 | 30 × 35 | 0.15 | 1.70 | ETXH201VSN681MR35S | | 270 | 30 × 40 | 0.15 | 1.15 | ETXH401VSN271MR40S |
| | 820 | 30 × 40 | 0.15 | 2.00 | ETXH201VSN821MR40S | | 270 | 35 × 30 | 0.15 | 1.13 | ETXH401VSN271MA30S |
| | 820 | 35 × 30 | 0.15 | 2.00 | ETXH201VSN821MA30S | | 330 | 30 × 45 | 0.15 | 1.29 | ETXH401VSN331MR45S |
| | 1,000 | 30 × 45 | 0.15 | 2.20 | ETXH201VSN102MR45S | | 330 | 35 × 35 | 0.15 | 1.26 | ETXH401VSN331MA35S |
| | 1,000 | 35 × 35 | 0.15 | 2.20 | ETXH201VSN102MA35S | | 330 | 40 × 30 | 0.15 | 1.28 | ETXH401VSN331MB30S |
| | 1,000 | 40 × 30 | 0.15 | 2.17 | ETXH201VSN102MB30S | | 390 | 30 × 50 | 0.15 | 1.44 | ETXH401VSN391MR50S |
| | 1,200 | 35 × 40 | 0.15 | 2.40 | ETXH201VSN122MA40S | | 390 | 35 × 40 | 0.15 | 1.43 | ETXH401VSN391MA40S |
| | 1,200 | 40 × 35 | 0.15 | 2.45 | ETXH201VSN122MB35S | | 470 | 35 × 45 | 0.15 | 1.60 | ETXH401VSN471MA45S |
| | 1,500 | 35 × 50 | 0.15 | 2.81 | ETXH201VSN152MA50S | | 470 | 40 × 35 | 0.15 | 1.58 | ETXH401VSN471MB35S |
| | 1,500 | 40 × 40 | 0.15 | 2.79 | ETXH201VSN152MB40S | | 560 | 35 × 50 | 0.15 | 1.79 | ETXH401VSN561MA50S |
| | 1,800 | 40 × 50 | 0.15 | 3.24 | ETXH201VSN182MB50S | | 560 | 40 × 40 | 0.15 | 1.78 | ETXH401VSN561MB40S |
| 250 | 390 | 30 × 30 | 0.15 | 1.30 | ETXH251VSN391MR30S | 680 | 40 × 50 | 0.15 | 2.05 | ETXH401VSN681MB50S | |
| | 470 | 30 × 35 | 0.15 | 1.42 | ETXH251VSN471MR35S | 820 | 40 × 60 | 0.15 | 2.36 | ETXH401VSN821MB60S | |
| | 560 | 35 × 30 | 0.15 | 1.58 | ETXH251VSN561MA30S | 450 | 220 | 30 × 40 | 0.20 | 1.04 | ETXH451VSN221MR40S |
| | 680 | 30 × 45 | 0.15 | 1.80 | ETXH251VSN681MR45S | | 220 | 35 × 30 | 0.20 | 1.02 | ETXH451VSN221MA30S |
| | 680 | 35 × 35 | 0.15 | 1.76 | ETXH251VSN681MA35S | | 270 | 30 × 45 | 0.20 | 1.19 | ETXH451VSN271MR45S |
| | 820 | 30 × 50 | 0.15 | 2.03 | ETXH251VSN821MR50S | | 270 | 35 × 35 | 0.20 | 1.16 | ETXH451VSN271MA35S |
| | 820 | 35 × 40 | 0.15 | 2.01 | ETXH251VSN821MA40S | | 330 | 30 × 50 | 0.20 | 1.33 | ETXH451VSN331MR50S |
| | 820 | 40 × 30 | 0.15 | 1.96 | ETXH251VSN821MB30S | | 330 | 35 × 40 | 0.20 | 1.32 | ETXH451VSN331MA40S |
| | 1,000 | 35 × 45 | 0.15 | 2.30 | ETXH251VSN102MA45S | | 390 | 35 × 45 | 0.20 | 1.48 | ETXH451VSN391MA45S |
| | 1,000 | 40 × 35 | 0.15 | 2.27 | ETXH251VSN102MB35S | | 470 | 35 × 50 | 0.20 | 1.64 | ETXH451VSN471MA50S |
| | 1,200 | 35 × 50 | 0.15 | 2.55 | ETXH251VSN122MA50S | | 560 | 40 × 60 | 0.20 | 1.98 | ETXH451VSN561MB60S |
| | 1,200 | 40 × 40 | 0.15 | 2.53 | ETXH251VSN122MB40S | | | | | | |
| 1,500 | 40 × 50 | 0.15 | 2.96 | ETXH251VSN152MB50S | | | | | | | |
| 1,800 | 40 × 60 | 0.15 | 3.39 | ETXH251VSN182MB60S | | | | | | | |

◆RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

| Frequency(Hz) | 50 | 120 | 300 | 1k | 10k | 50k |
|-------------------------|------|------|------|------|------|------|
| 200, 250V _{dc} | 0.81 | 1.00 | 1.17 | 1.32 | 1.45 | 1.50 |
| 400, 450V _{dc} | 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.