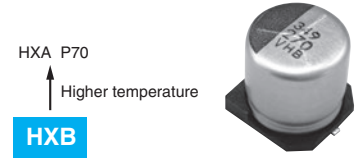


HXB Series New!

- High reliability and high voltage are realized by hybrid electrolyte
- Endurance with ripple current : 5,000 hours at 105°C
- Rated voltage range : 16 to 80V_{dc}, Capacitance range : 6.8 to 470μF
- For high reliability applications.
(Automotive equipment, Base station equipment, etc.)
- RoHS Compliant
- Halogen Free

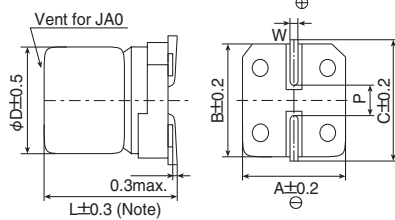


SPECIFICATIONS

| Items | Characteristics | | | | | | | |
|--|--|---------------------------------------|------|------|------|------|------|------------------|
| Category Temperature Range | -55 to +105°C | | | | | | | |
| Rated Voltage Range | 16 to 80V _{dc} | | | | | | | |
| Capacitance Tolerance | ±20% (M) (at 20°C, 120Hz) | | | | | | | |
| Leakage Current | I=0.01CV Where, I : Max. leakage current (μA), C: Nominal capacitance(μF), V : Rated voltage(V) (at 20°C after 2 minutes) | | | | | | | |
| Dissipation Factor (tan δ) | Rated voltage(V _{dc}) | 16V | 25V | 35V | 50V | 63V | 80V | |
| | tan δ (Max.) | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.08 | (at 20°C, 120Hz) |
| Low Temperature Characteristics (Max. Impedance Ratio) | Z(-25°C)/Z(+20°C) ≤ 1.5 Z(-55°C)/Z(+20°C) ≤ 2.0 (at 100kHz) | | | | | | | |
| 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 5,000 hours at 105 °C. | | | | | | | |
| | Capacitance change | ≤ ±30% of the initial value | | | | | | |
| | D.F. (tan δ) | ≤ 200% of the initial specified value | | | | | | |
| | ESR | ≤ 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 | ≤ ±30% of the initial value | | | | | | |
| | D.F. (tan δ) | ≤ 200% of the initial specified value | | | | | | |
| | ESR | ≤ 200% of the initial specified value | | | | | | |
| | Leakage current | ≤ The initial specified value | | | | | | |

DIMENSIONS [mm]

Terminal Code : A



Note : L±0.5 for HA0 and JA0

| Size Code | φD | L | A | B | C | W | P |
|-----------|-----|------|------|------|------|------------|-----|
| F61 | 6.3 | 5.8 | 6.6 | 6.6 | 7.2 | 0.5 to 0.8 | 1.9 |
| F80 | 6.3 | 7.7 | 6.6 | 6.6 | 7.2 | 0.5 to 0.8 | 1.9 |
| HA0 | 8 | 10.0 | 8.3 | 8.3 | 9.0 | 0.7 to 1.1 | 3.1 |
| JA0 | 10 | 10.0 | 10.3 | 10.3 | 11.0 | 0.7 to 1.1 | 4.5 |

MARKING

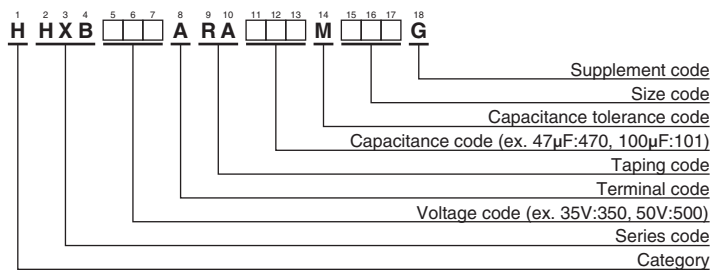
EX) 35V47μF



Rated Voltage Symbol

| Rated voltage (V _{dc}) | Symbol |
|----------------------------------|--------|
| 16 | C |
| 25 | E |
| 35 | V |
| 50 | H |
| 63 | J |
| 80 | K |

PART NUMBERING SYSTEM



Please refer to "Product code guide (conductive polymer type)"

◆STANDARD RATINGS

| WV (V _{dc}) | Cap (μF) | Size code | ESR (mΩ max./20°C, 100kHz) | Rated ripple current (mA _{rms} /105°C, 100kHz) | Part No. |
|--------------------------|-------------|-----------|-------------------------------|--|--------------------|
| 16 | 82 | F61 | 45 | 1,600 | HHXB160ARA820MF61G |
| | 150 | F80 | 27 | 2,200 | HHXB160ARA151MF80G |
| | 270 | HA0 | 22 | 2,500 | HHXB160ARA271MHA0G |
| | 470 | JA0 | 18 | 2,600 | HHXB160ARA471MJA0G |
| 25 | 47 | F61 | 50 | 1,300 | HHXB250ARA470MF61G |
| | 56 | F61 | 50 | 1,300 | HHXB250ARA560MF61G |
| | 68 | F80 | 30 | 2,000 | HHXB250ARA680MF80G |
| | 100 | F80 | 30 | 2,000 | HHXB250ARA101MF80G |
| | 150 | HA0 | 27 | 2,300 | HHXB250ARA151MHA0G |
| | 220 | HA0 | 27 | 2,300 | HHXB250ARA221MHA0G |
| | 270 | JA0 | 20 | 2,500 | HHXB250ARA271MJA0G |
| | 330 | JA0 | 20 | 2,500 | HHXB250ARA331MJA0G |
| 35 | 27 | F61 | 60 | 1,300 | HHXB350ARA270MF61G |
| | 47 | F61 | 60 | 1,300 | HHXB350ARA470MF61G |
| | 47 | F80 | 35 | 2,000 | HHXB350ARA470MF80G |
| | 68 | F80 | 35 | 2,000 | HHXB350ARA680MF80G |
| | 100 | HA0 | 27 | 2,300 | HHXB350ARA101MHA0G |
| | 150 | HA0 | 27 | 2,300 | HHXB350ARA151MHA0G |
| | 150 | JA0 | 20 | 2,500 | HHXB350ARA151MJA0G |
| | 270 | JA0 | 20 | 2,500 | HHXB350ARA271MJA0G |
| 50 | 10 | F61 | 80 | 1,100 | HHXB500ARA100MF61G |
| | 15 | F80 | 40 | 1,600 | HHXB500ARA150MF80G |
| | 22 | F61 | 80 | 1,100 | HHXB500ARA220MF61G |
| | 33 | F80 | 40 | 1,600 | HHXB500ARA330MF80G |
| | 33 | HA0 | 30 | 1,800 | HHXB500ARA330MHA0G |
| | 47 | HA0 | 30 | 1,800 | HHXB500ARA470MHA0G |
| | 56 | JA0 | 25 | 2,000 | HHXB500ARA560MJA0G |
| | 68 | HA0 | 30 | 1,800 | HHXB500ARA680MHA0G |
| | 100 | JA0 | 25 | 2,000 | HHXB500ARA101MJA0G |
| 63 | 6.8 | F61 | 120 | 1,000 | HHXB630ARA6R8MF61G |
| | 10 | F61 | 120 | 1,000 | HHXB630ARA100MF61G |
| | 10 | F80 | 80 | 1,500 | HHXB630ARA100MF80G |
| | 22 | F80 | 80 | 1,500 | HHXB630ARA220MF80G |
| | 22 | HA0 | 40 | 1,600 | HHXB630ARA220MHA0G |
| | 33 | HA0 | 40 | 1,600 | HHXB630ARA330MHA0G |
| | 33 | JA0 | 30 | 1,800 | HHXB630ARA330MJA0G |
| | 56 | JA0 | 30 | 1,800 | HHXB630ARA560MJA0G |
| | 80 | JA0 | 30 | 1,800 | HHXB630ARA800MJA0G |
| 80 | 22 | HA0 | 45 | 1,600 | HHXB800ARA220MHA0G |
| | 39 | JA0 | 35 | 1,700 | HHXB800ARA390MJA0G |