

MESSRS: APPROVAL NO 710-005 DATE 2017.08.06

ALUMINUM ELECTROLYTIC CAPACITOR APPROVAL SHEET

CATALOG TYPE NHA SERIES USER PART NO. 适用機種 特记事項 Halogen-Free

QINGDAO SAMYOUNG ELECTRONICS CO.,LTD. MANAGER OF DEVELOPMENT DEPARTMENT GONG JANG SUG



USER APPROVAL: APPROVAL NO.:

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Specifications of NHA Series Item Characteristics Rated Voltage Range 6.3 ~ 100VDC 160 ~ 400VDC 450 ~ 500VDC

Leakage Current (at 20 °C) After 1 minute: 0.03CV(μA) or 4 μA, whichever is greater After 2 minutes: 0.01CV(μA) or 3 μA, whichever is greater

Dissipation Factor (TANδ) (20 °C, 120Hz) Rated Voltage(VDC) 6.3 10 16 25 35 50 63 100 160-250 350-500

Temperature Characteristics Rated Voltage(VDC) 6.3 10 16 25 35 50 63-100 160 200-400 450-500

Load Life The following specifications shall be satisfied when the capacitors are restored to 20 °C after the rated voltage applied for 2,000 hours at 105 °C.

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.

Others Satisfied characteristics KS C IEC 60384-4

A. DIMENSIONS OF NHA Series B. MARKING: BROWN SLEEVE, WHITE INK

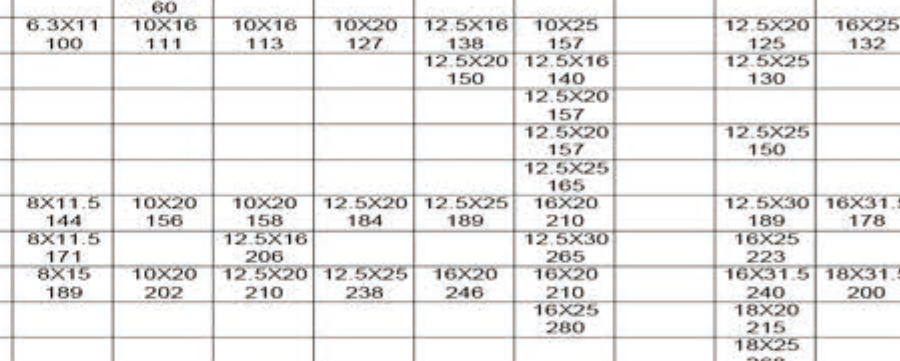
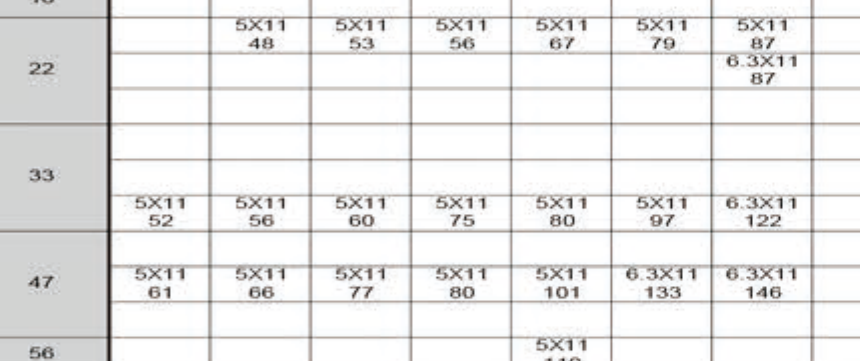
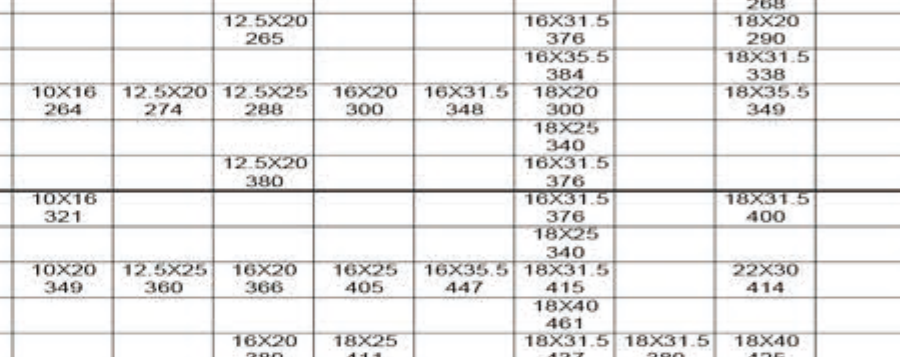


Table of dimensions: ΦD, Φd, F, ΦD', L' for various capacitor sizes.



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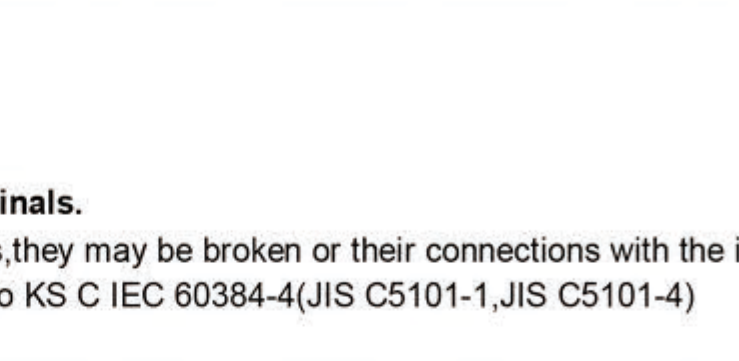
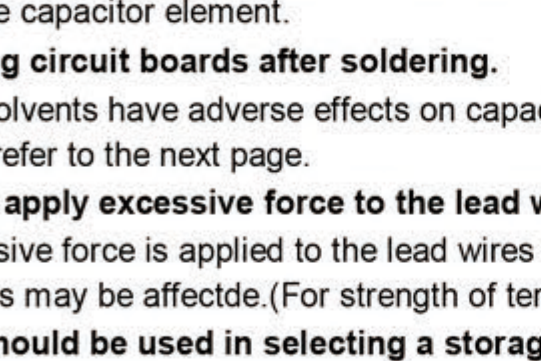
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Table of capacitance values for NHA Series across various voltage ratings and temperatures.

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STRUCTURE AND MATERIALS



CE04 TYPE MINIATURE SIZED TYPE CAPACITORS COMPONENT

Table of materials and vendors for CE04 type capacitors, including Lead Wire, AL Lead, Packing Pad, Sleeve, AL Foil, Separator, and Adhesive Tape.

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When using aluminum electrolytic capacitors, pay strict attention to the following:

- 1. Electrolytic capacitors for DC application require polarization. 2. Do not apply a voltage exceeding the capacitor's voltage rating. 3. Do not allow excessive ripple current to pass. 4. Ascertain the operating temperature range. 5. The electrolytic capacitor is not suitable for circuits in which charge and discharge are frequently repeated.

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CLEANING CONDITIONS

Aluminum electrolytic capacitors that have been exposed to halogenated hydrocarbon cleaning and defluxing solvents are susceptible to attack by these solvents.

Table of cleaning agents: Chemical Name, Structural Formula, Representative Brand Name.

We would like to recommend you the below cleaning materials for your stable cleaning condition taking the place of previous materials.

Isopropyl Alcohol (IPA) or Water Cleaning method: Of immersion, ultrasonic or vapor cleaning. Maximum cleaning time: 5 minutes (Chip type: 2 minutes)

Aluminum electrolytic capacitors are easily affected by halogen ions, particularly by chloride ions.

Excessive amounts of halogen ions, if happened to enter the inside of the capacitors, will give corrosion accidents-rapid capacitance drop and vent open.

Remove flux from circuit boards. If used in circuits in which charge and discharge are frequently repeated, the capacitance value may drop, or the capacitor may be damaged.

Apply voltage treatment to the electrolytic capacitor which has been allowed to stand for a long time. If the electrolytic capacitor is allowed to stand for a long time, its withstand voltage is liable to drop.

Be careful of temperature and time when soldering. When soldering a printed circuit board with various components, care must be taken that the soldering temperature is not too high.

Do not place a soldering iron on the body of the capacitor. The electrolytic capacitor is covered with a vinyl sleeve. If the soldering iron comes in contact with the electrolytic capacitor body during wiring, damage to the vinyl sleeve and/or case may result.

Some circuit boards after soldering. Some solvents have adverse effects on capacitors. Please refer to the next page.

Do not apply excessive force to the lead wires or terminals. If excessive force is applied to the lead wires and terminals, they may be broken or their connections with the internal elements may be affected.

Care should be used in selecting a storage area. If electrolytic capacitors are exposed to high temperatures caused by such things as direct sunlight, the life of the capacitor may be adversely affected.

Surge voltage. The surge voltage rating is the maximum DC over-voltage to which the capacitor may be subjected for short periods not exceeding approximately 30 seconds.

Note 1 Voltage treatment... Voltage treatment shall be performed by increasing voltage up to the capacitor's voltage rating gradually while lowering the leakage current.

Note 2 For methods of testing, refer to KS C IEC 60384-4. (JIS C 5101-1, JIS C 5101-4)

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