

North West Components (NWC) - Aluminum Electrolytics

General Specifications & Test Parameters

CONSTRUCTION

Electrodes:

High purity aluminum.

Separators:

Porous paper impregnated with a high stability electrolyte.

Terminations:

Welded for high mechanical and electrical strength.

Case:

Extruded aluminum can.

Windings:

Low inductance.

INSULATING SLEEVE

Standard Sleeve:

Polyvinyl chloride (PVC)

Optional Material:

Polyester.

Insulation Resistance:

$\geq 50 \Omega$ ohms @ 100VVDC.

Dielectric Strength:

1.5kV for 30 seconds with no breakdown.

SAFETY VENTING

Vented safety end seals are supplied on selected case sizes.

SOLDERABILITY

The lead of the capacitor shall be immersed in 10 \pm 2% (JIS K 1501) or isopropyl alcohol (JIS K 1522, JIS K 8839) solution of colophonium (JIS Z 3282) for 2 \pm 0.5 seconds.

The lead of the capacitor is then dipped in solder H63A (JIS Z 3282) at 235 \pm 5°C for 2 \pm 0.5 seconds.

The depth of dipping the lead of the capacitor in flux and solder shall be up to 2-2.5mm from the body of the capacitor. After the soldering operation, the lead shall be covered with solder for 3/4 and over.

CLEANING CONDITIONS

Freon TE[®] or Freon TES[®] (registered trademark of Dupont, Inc.)

Cleaning Method:

Immersion (below 40°C), Ultrasonic (below 40°C), or Vapor

Maximum Cleaning Time:

Not to exceed 5 minutes.

NOTE: Drying process to occur immediately following cleaning. We recommend a minimum drying time of 10 minutes. To ensure capacitor performance, make certain to dry capacitors fully before operating.

LEAD STRENGTH

Tensile Strength:

The capacitors shall withstand the constant tensile force between the body and each lead for 10 seconds without failure - both electrically and mechanically. Results specified in the table below.

Lead Diameter	$\phi 0.5$	$\phi 0.6, 0.8$
Tensile	5	10

Bending Strength:

With the capacitor in a vertical position, apply load (specified in the table below) axially to each lead. The capacitor shall be rotated slowly from the vertical to the horizontal position, back to the vertical, then 90° in the opposite direction, and back to the original position.

Performance of the capacitor shall not have changed and the leads shall be damage free.

Lead Diameter	$\phi 0.5$	$\phi 0.6, 0.8$
Bending Force (Kg)	0.25	0.5