



## GENERAL SPECIFICATIONS

### 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. Hermetically sealed within the case.

**Seals:**

Highest quality rubber, rubber/phenolic or high temperature elastomer end seals. Vented safety end seals are on selected sizes. Epoxy end seals are available on special order.

### INSULATING SLEEVE

**Standard Sleeve:**

Polyvinyl chloride (PVC).

**Optional Material:**

Polyester.

**Insulation Resistance:**

≥50 MEGAOHMS @100WVDC.

**Dielectric Strength:**

1.5kV for 30 seconds with no break-down.

### MARKINGS

**Locations:**

On sleeve or aluminum can.

IC

Capacitance (μf)

Working voltage (WVDC)

Location of cathode lead wire (on polarized capacitors)

Date code

Maximum Operating Temperature

Series Designation

### AMMO PACK/TAPE & REEL CONFIGURATIONS

Axial capacitors with diameters ≤12.5 mm are available on tape and reel for use in automatic insertion equipment.

Radial capacitors with diameters ≤12.5 mm are available in Ammo Pack/Tape and Reel for use in automatic insertion equipment.

### SHOCK & VIBRATION

All IC capacitors meet requirements of MIL STD 202F method 201 Part A:

10 g or 0-50HZ for a maximum total of

6 hours with no serious external or internal damage. After test, electrical performance will be within standard +25°C specifications.

### SAFETY VENTING

Vented safety end seals are supplied on selected case sizes.

### SOLDERABILITY

All capacitors meet the solderability requirements of ANSI/J-STD 002. Flow soldering can be used when the above temperature-time considerations are observed. Follow limits outlined in EIA RS395 par. 2.1.4.

### LEAD PULL & BEND TEST

**Lead pull**

5 lbs. axially for 10 seconds

**Test:**

(MIL STD 202D method 211A part A)

**Lead bend**

1 lb. for one cycle

**Test:**

(MIL STD 202D method 211A part C)

### STANDARD TEST METHODS

E.I.A. RS395

E.I.A. RS296D

E.I.A. RS468A

MIL-202F

J.I.S.-C-5141

I.E.C. Standards

ANSI/J-STD-002

### CLEANING SOLUTION PRECAUTIONS:

**NOTE: Use of halogenated hydrocarbon or chlorine based cleaning solvents can contaminate aluminum electrolytic capacitors without epoxy end seals.**

These chemicals can penetrate into the capacitor windings thus causing intermittent operation and premature failure. The corrosive effects of halogens on aluminum are well known. Care must be taken to prevent incursion for reliable long life operation.

### SOLVENT TOLERANT END SEALS:

Solvent tolerant end seals\* are standard on most series of IC aluminum electrolytic capacitors.

### OPTIONAL EPOXY END SEALS:

Epoxy End Seals\* are available on most series of aluminum electrolytic capacitors as an available option (indicated at each product.) The Epoxy End Seal is recommended for use with all halogenated or chlorinated cleaning solvents. Epoxy end seals also provide mechanical rigidity for those applications where microphonics could be a concern. IC offers a proprietary epoxy end seal specifically developed for protection of aluminum electrolytic capacitors against solvent penetration during typical board cleaning procedures.

\* **NOTE:** The solvent tolerant end seals are useable under the above stated solvents. No guarantees or warranties are expressed or implied with the use of any solvents. Chlorinated solvents will swell PVC sleeving and may result in cracking or splitting after exposure to the solvent.