



## SPECIFICATIONS

**CONSTRUCTION:** Auricap metalized polypropylene capacitors are available only in extended foil (non-inductive) construction.

**PACKAGING:** Polyester tape wrap with epoxy end fills gives the best possible volume density for this type unit. Custom packaging and labeling is available on custom design orders.

**LEADS:** Auricap leads are of polished, stranded High Purity Oxygen Free Copper with XLPE insulation. Tinned copper leads are available on custom order.

**TEMPERATURE RANGE:** May be operated at rated DC voltage from -55°C to +85°C or to +105°C at voltages, indicated by the derating curve on the applications page.

### **ELECTRICAL [NON-DESTRUCTIVE] TESTS:**

1. Capacitance shall be measured at or referred to 1000Hz  $\pm$ 20Hz at 25°C  $\pm$ 5°C for capacitance values up to and including 1.0MF. Capacitance values greater than 1.0MF shall be measured at 60Hz  $\pm$ 6Hz.

Ref: MIL-STD-202E, Method 305.

2. Dissipation factor shall be measured as described for capacitance and shall not exceed 0.2%. Typical values, throughout temperature range, are given on curves on the Auricap Application page.

3. Insulation resistance shall be measured at rated voltage or 500VDC whichever is less. After 2 minutes electrification, minimum values shall be 200,000 meg/MF, need not exceed 400,000 megohms.

Ref: MIL-STD-202E, Method 302.

4. Dielectric Strength: Capacitors shall withstand specified DC test potential for 60 seconds through a limiting resistance of 1 ohm/volt.

Terminal to terminal — 150% of DC rating.

Terminal to case — 200% of DC rating.

Ref: MIL-STD-202E, Method 301.

5. Dielectric Absorption: Dielectric absorption shall not exceed 0.1% when tested to MIL-C-19978D.

Ref: MIL-C-19978D. Paragraph 3.22.

### **ENVIRONMENTAL TESTS:**

**1. Vibration:** Capacitors will meet or exceed the requirements of MIL-STD-202E, Method 204C.

**2. Moisture Resistance:** Capacitors will meet or exceed the requirements of MIL-STD-202E, Method 103B, Condition B, with 500V or rated voltage applied, whichever is less.

**3. Life Test:** Will withstand 140% of rated DC voltage for 250 hours at 105°C. No more than 1 failure in 12 units permitted when tested.

**4. Lead Pull Test:** The leads on these capacitors shall withstand a steady axially applied pull of 5lbs. for one minute.

### **CUSTOM DESIGN**

Available on short notice — special shapes, values, characteristics, combination sections and networks. Non-metallic cases or fabricated steel and brass with glass-to-metal seals.

Engineering service is expert and prompt.

Audience LLC reserves the right, from time to time, such departures from the detail specifications as may be required to permit improvements in the design of its products.

The information included herein is believed to be accurate and reliable. However, Audience LLC assumes no responsibility for its use, nor any infringements of patents or other rights of third parties which may result from its use.

# auricap

## APPLICATIONS

Auricap Metalized Polypropylene capacitors in round wrap and fill cases offer the user maximum volume density for cord wood type assemblies. These units have consistently met the environmental requirements of MIL-C-55514A and moisture resistance per MIL-STD E, method 103B.

Auricap Metalized Polypropylene capacitors combine the reliability of self-healing action with high dielectric strength and insulation resistance of Polypropylene film.

Auricap Metalized Polypropylene capacitors are designed primarily for DC applications — blocking, coupling, bypass, DC line filter and RF and audio components are small in comparison to DC rating. However, they have been used successfully in such AC power applications as power factor correction and AC line filtering.

Auricap Metalized Polypropylene capacitors operate at all temperatures from -55 to +85°C, derate to 60% at 105°C.

### AC APPLICATION GUIDE: (AC VOLTAGE RATING, -55°C TO +85°C AMBIENT)

DC VOLTAGE RATING	EQUIVALENT VAC (RMS) RATINGS AT			
	60Hz	400Hz	800Hz	1200Hz
200 (.00 $\mu$ F through 1.0 $\mu$ F)	160	120	80	60
(1.1 $\mu$ F through 5.0 $\mu$ F)	120	90	60	50
400 (.001 $\mu$ F through .82 $\mu$ F)	240	180	120	90
(.83 $\mu$ F through 4.0 $\mu$ F)	210	157	105	78
600 (.001 $\mu$ F through .47 $\mu$ F)	504	280	240	90
(.23 $\mu$ F through .82 $\mu$ F)	415	230	195	74

(AC voltage assumed to be sine wave)

### TYPICAL TEMPERATURE CHARACTERISTICS

