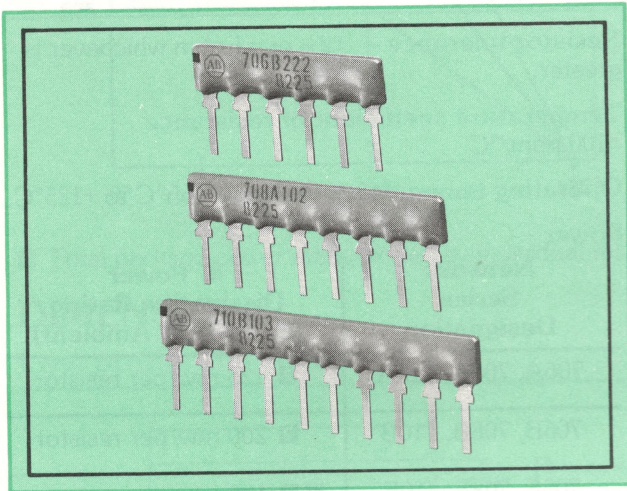




# Series 700 Conformal Coated Cermet Resistor Networks



## C-SIP

### Single In-Line Package

#### FEATURES

- 96% Alumina Substrate
- Permanently Laser Marked
- 0.100 Inch (2,54mm) Lead Spacing
- Low Package Height  
0.190 inch (4,83mm)
- 6, 8 and 10 Pins
- Durable Conformal Coating
- Standard Circuits
- High Quality

## SPECIFICATIONS

### General capabilities

#### C-SIP – Single In-Line Package:

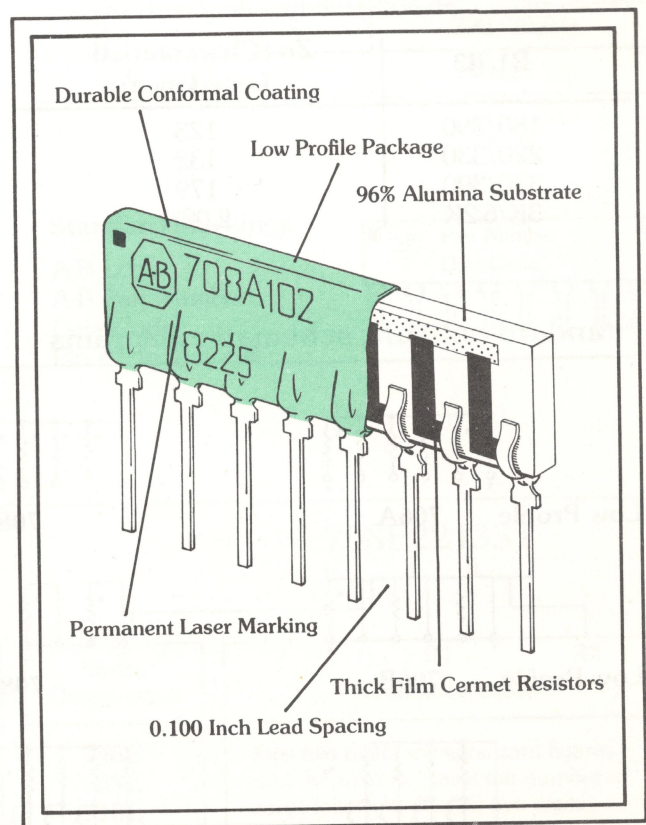
- A conformally coated single in-line resistor network.
- Provides standard cermet resistor network circuits: resistors tied to a common buss, isolated individual resistors, digital line terminator.
- Standard circuits available in 6, 8 and 10 pin packages in a low package height.
- Double 100% electrical test provides high quality on the board performance.

### Applications

- Pull-up and pull-down arrays
- Transmission line terminators
- Current limiting resistors
- ECL terminating networks

For Applications Information refer to the following Allen-Bradley Application Notes:

- Digital System Resistor Arrays: EC5410-4.1
- ECL Terminator Networks: EC5410-4.2
- Resistive Attenuator Pads: EC5410-4.3







# Conformal Coated Cermet Resistor Networks

## Standard resistance values

Series 706A, 708A, 710A, 706B, 708B and 710B Resistor Networks

R (Ohms)				
22	180	1.2K	6.8K	47K
33	220	1.5K	8.2K	56K
39	270	1.8K	10K	68K
47	330	2K	12K	100K
56	390	2.2K	15K	120K
68	470	2.7K	18K	150K
82	560	3.3K	22K	180K
100	680	3.9K	27K	220K
120	820	4.7K	33K	470K
150	1K	5.6K	39K	1M

For intermediate values between 22 ohms and 1 megohm not listed above, consult Allen-Bradley Co., Milwaukee, Wisconsin.

Series 706E, 708E and 710E Resistor Networks

R1/R2	Zo (Characteristic Impedance)
180/390	123
220/330	132
330/390	179
3K/6.2K	2.02K

## Standard network specifications

**Resistor tolerance** —  $\pm 2\%$  or  $\pm 1$  ohm whichever is greater.

**Temperature coefficient of resistance** —  $\pm 100$  ppm/ $^{\circ}\text{C}$ .

**Operating temperature range** —  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .

**Power** —

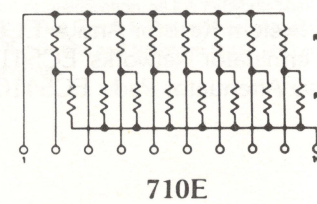
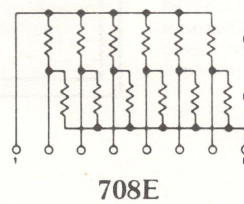
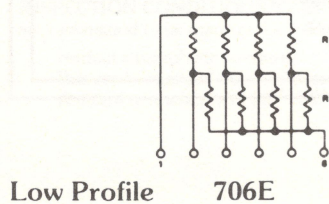
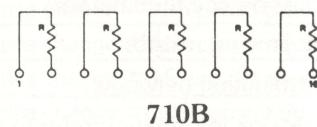
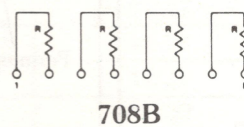
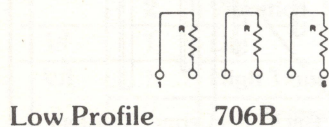
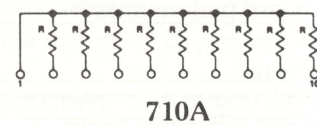
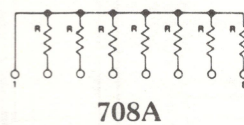
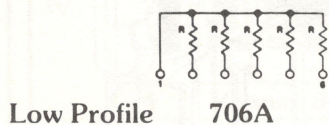
Network Series Designation	Power Dissipation Rating (up to $70^{\circ}\text{C}$ Ambient)
706A, 708A, 710A	2 125 mw/per resistor
706B, 708B, 710B	2 200 mw/per resistor
706E, 708E, 710E	3 2 125 mw/per resistor

1 At  $+70^{\circ}\text{C}$  power derates linearly from full rated power to 0 wattage at  $+125^{\circ}\text{C}$ .

2 Rated continuous working voltage (RCWV), based on nominal resistance (R) in ohms, is  $\sqrt{\text{Individual Resistor Power Rating (see Table)} \times R}$  or 100 volts, whichever is less.

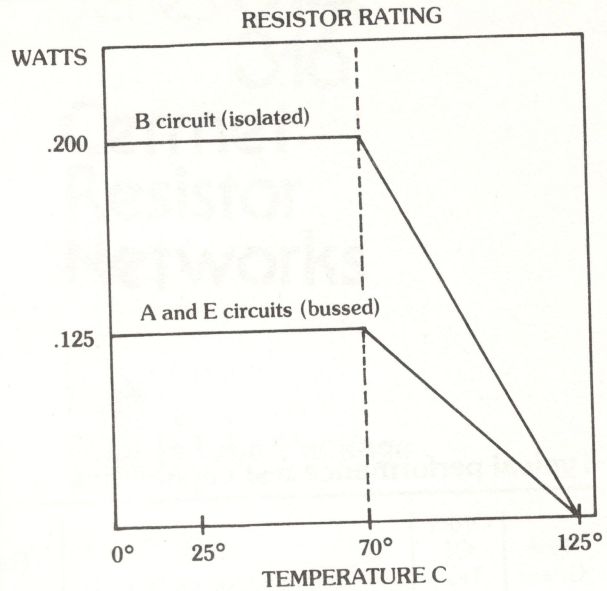
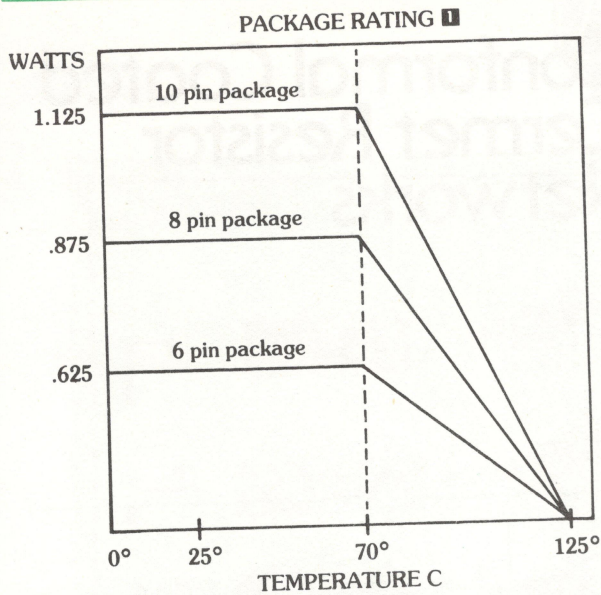
3 Power dissipation per resistor limited by package power rating shown on page 77.

## Standard network schematic diagrams





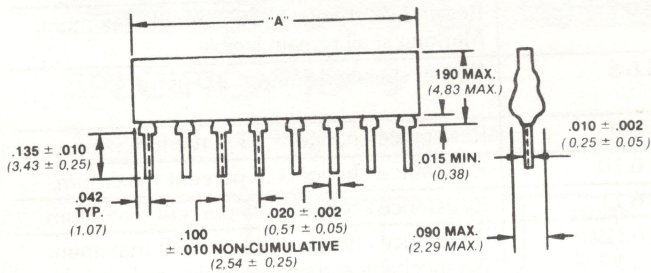
## Power rating curves



■ Total package power rating limited by individual resistor power dissipation shown on page 76.

## DIMENSIONS

### Low profile 700 series



Pkg. Style	No. of Pins	"A" Dimension Max.
706	6	.590 (14,98)
708	8	.790 (20,07)
710	10	.990 (25,15)

NOT TO SCALE

### TOLERANCE

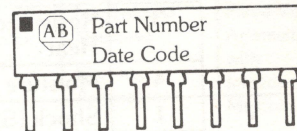
Dimensional Tolerance ±.005 (0,13)

Basic dimensions in inches.

Dimensions shown in parentheses are in millimeters.

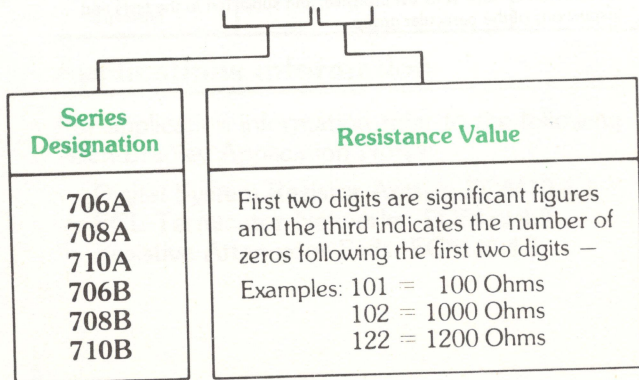
### Standard Markings

- A-B Logo
- A-B Part Number
- Date Code
- Pin #1 Indicator ■



## EXPLANATION OF PART NUMBERS

708A103



708E221331

