

### Features

- Low noise termination for CMOS
- Combined resistors and capacitors in SIP package saves space
- Reduced insertion time
- Insulation resistance testing for reliability
- Pin counts from 4 to 16 available
- RoHS compliant\*



This series is currently available but not recommended for new designs.

For information on RC Terminators, download Bourns' RC Terminator Networks Application Note.

## 700 Series - RC Terminator Networks

### Electrical Characteristics - Resistors

Standard Resistance Range,  $\pm 5\%$  Tolerance..... 22 ohms to 470K ohms  
 Operating Voltage..... 50 volts maximum

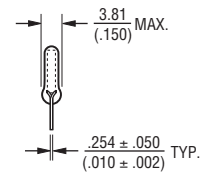
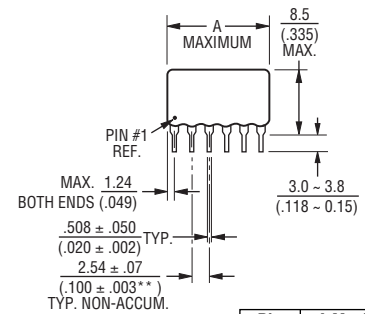
### Electrical Characteristics - Capacitors

Capacitance Range ..... 39 pF to 47,000 pF  
 Capacitance Range ..... 470 pF to 47,000 pF X7R  
 Capacitance Range ..... 39 pF to 470 pF NPO  
 Capacitance Tolerance.....  $\pm 20\%$   
 Operating Temperature..... -30 °C to +85 °C  
 Voltage Rating ..... 50 volts

### Physical Characteristics

Flammability ..... Conforms to UL94V-0  
 Lead Frame Material ..... Copper, solder coated  
 Body Material..... Conformal coat

### Product Dimensions

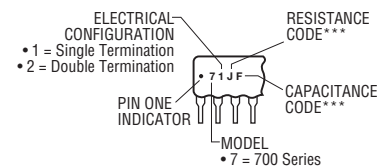


Pin Count	A Maximum mm (Inches)
4	10.11 (.398)
5	12.65 (.498)
6	15.19 (.598)
7	17.73 (.698)
8	20.27 (.798)
9	22.81 (.898)
10	25.35 (.998)
11	27.89 (1.098)
12	30.43 (1.198)
13	32.97 (1.298)
14	35.51 (1.398)
15	38.04 (1.498)
16	40.59 (1.598)

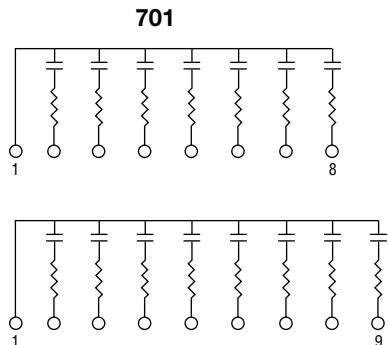
Governing dimensions are metric. Dimensions in parentheses are inches and are approximate.

\*\*Terminal centerline to centerline measurements made at point of emergence of the lead from the body.

### Typical Part Marking

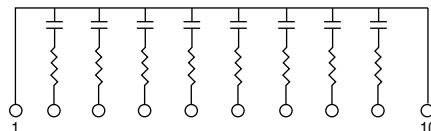


\*\*\*See Standard Marking, Values and Codes tables.



NO. OF LINES	BOURNS P/N	PACKAGE
7	4608H-701-RC/CCL	High Profile Conformal SIP
8	4609H-701-RC/CCL	
9	4610H-701-RC/CCL	

### 702



NO. OF LINES	BOURNS P/N	PACKAGE
8	4610H-702-RC/CCL	High Profile Conformal SIP

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

## Additional Features

- Prevents bus lines and control signals from floating to undefined logic levels.
- Optimizes signal transmission in high performance systems through proper termination.
- Eliminates overshoot and ringing, increases noise immunity, minimizes signal distortion, and lowers EMI/RFI radiation.
- Minimizes space and routing problems, and reduces manufacturing cost per installed resistive function.
- Increases board yields and reliability by reducing component count.

## 700 Series - RC Terminator Networks

**BOURNS®**

### Standard Resistance Values And Codes

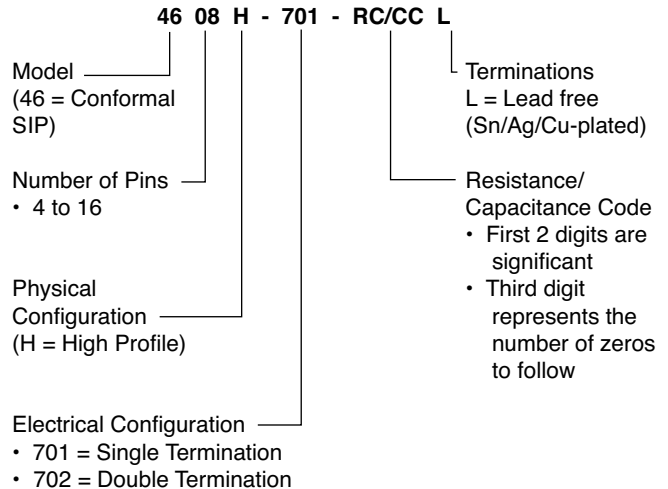
Resistance (Ohms)	Marking Code	Resistance Code	Resistance (Ohms)	Marking Code	Resistance Code
22	A	220	2,700	A3	272
27	B	270	3,300	A4	332
33	C	330	3,900	A5	392
39	D	390	5,600	A6	562
47	E	470	6,800	A7	682
50	F	500	8,200	A8	822
56	G	560	10,000	A9	103
68	H	680	12,000	B1	123
75	I	750	15,000	B2	153
82	J	820	18,000	B3	183
100	K	101	20,000	B4	203
120	L	121	22,000	B5	223
150	M	151	27,000	B6	273
180	N	181	33,000	B7	333
220	O	221	39,000	B8	393
270	P	271	47,000	B9	473
330	Q	331	56,000	C1	563
390	R	391	68,000	C2	683
470	S	471	82,000	C3	823
560	T	561	100,000	C4	104
680	U	681	120,000	C5	124
820	V	821	150,000	C6	154
1,000	W	102	180,000	C7	184
1,200	X	122	220,000	C8	224
1,500	Y	152	270,000	C9	274
1,800	Z	182	330,000	D1	334
2,000	A1	202	390,000	D2	394
2,200	A2	222	470,000	D3	474

Values not appearing in above tables are available to optimize system performance. Contact Bourns Networks to inquire.

### Standard Capacitance Values And Codes

Capacitance	Marking Code	Capacitance Code	Capacitance	Marking Code	Capacitance Code
39pF	A	390	1000 pF	R	102
47	B	470	1200	S	122
56	C	560	1500	T	152
68	D	680	1800	U	182
82	E	820	2200	V	222
100	F	101	2700	W	272
120	G	121	3300	X	332
150	H	151	3900	Y	392
180	I	181	4700	Z	472
220	J	221	5600	A1	562
270	K	271	6800	A2	682
330	L	331	8200	A3	822
390	M	391	.010 $\mu$ F	A4	103
470	N	471	.012	A5	123
560	O	561	.015	A6	153
680	P	681	.018	A7	183
820	Q	821	.022	A8	223
			.027	A9	273
			.033	B1	333
			.039	B2	393
			.047	B3	473

### How To Order RC Terminator Networks



REV. 12/15

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