Features

- RoHS compliant* versions available (see How to Order "Termination" option)
- High profile offers increased power handling
- Compatible with automatic insertion equipment
- Superior package integrity
- Now available with improved tolerance to ±0.5 %

4300H Series - Thick Film Molded SIPs

Product Characteristics

Resistance Range
10 ohms to 10 megohms

Maximum Operating Voltage
100 V

Temperature Coefficient of Resistance
50 Ω to 2.2 megohms: ±100 ppm/°C
below 50 Ω: ±250 ppm/°C
above 2.2 megohms: ±250 ppm/°C

TCR Tracking
50 ppm/°C maximum; equal values

Resistor Tolerance
See circuits

Operating Temperature
-55 °C to +125 °C

Insulation Resistance
10,000 megohms minimum

Dielectric Withstanding Voltage
200 VRMS

Lead Solderability
Meet requirements of MIL-STD-202 Method 208

Environmental Characteristics

TESTS PER MIL-STD-202...... AR MAX.
Short Time Overload......................±0.25 %
Load Life.................................±1.00 %
Moisture Resistance....................±0.50 %
Resistance to Soldering Heat............±0.25 %
Terminal Strength.......................±0.25 %
Thermal Shock............................±0.25 %

Physical Characteristics

Flammability
Conforms to UL94V-0

Lead Frame Material
Copper, solder coated

Body Material
Novolac epoxy

How To Order

43 06 H - 101 - 222

Model
(43 = Molded SIP)

Number of Pins
(= Number of Taps)

(H = Thick Film High Profile)

Electrical Configuration
- 101 = Bussed
- 102 = Isolated
- 104 = Dual Terminator

Resistance Code
- First 2 digits are significant
- Third digit represents the number of zeros to follow.

Resistance Tolerance
- Blank = ±2 % (see "Resistance Tolerance" on next page for resistance range)
- F = ±1 % (100 ohms - 1 megohm)
- D = ±0.5 % (100 ohms - 1 megohm)

Terminations
- All electrical configurations EXCEPT 104:
  LF = Tin-plated (RoHS compliant version)
- ONLY electrical configuration 104:
  L = Tin-plated (RoHS compliant version)
- Blank = Tin-Lead-plated

Consult factory for other available options.

Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.

For information on specific applications, download Bourns’ application notes:
- DRAM Applications
- Dual Terminator Resistor Networks
- R/2R Ladder Networks
- SCSI Applications

4300H Series - Thick Film Molded SIPs

### Isolated Resistors (102 Circuit)
- Model 4304H-102-RC (4 Pin)
- Model 4306H-102-RC (6 Pin)
- Model 4308H-102-RC (8 Pin)
- Model 4310H-102-RC (10 Pin)

These models incorporate 2, 3, 4 or 5 isolated thick-film resistors of equal value, each connected between two pins.

**Resistance Tolerance**
- 10 ohms to 49 ohms: ±1 ohm
- 50 ohms to 5 megohms: ±2 %*
- Above 5 megohms: ±5 %

**Power Rating per Resistor**
- At 70 °C: 0.50 watt

**Power Temperature Derating Curve**

---

### Bussed Resistors (101 Circuit)
- Model 4304H-101-RC (4 Pin)
- Model 4306H-101-RC (6 Pin)
- Model 4308H-101-RC (8 Pin)
- Model 4310H-101-RC (10 Pin)

These models incorporate 3, 5, 7, or 9 thick-film resistors of equal value, each connected between a common bus (pin 1) and a separate pin.

**Resistance Tolerance**
- 10 ohms to 49 ohms: ±1 ohm
- 50 ohms to 5 megohms: ±2 %*
- Above 5 megohms: ±5 %

**Power Rating per Resistor**
- At 70 °C: 0.30 watt

**Power Temperature Derating Curve**

---

### Dual Terminator (104 Circuit)
- Model 4304H-104-R1/R2
- Model 4306H-104-R1/R2
- Model 4308H-104-R1/R2 (shown)
- Model 4310H-104-R1/R2

4308H-104 (shown above) is an 8-pin configuration and terminates 6 lines. Pins 1 and 8 are common for ground and power, respectively. Twelve thick-film resistors are paired in series between the common lines (pins 1 and 8).

**Resistance Tolerance**
- Below 100 ohms: ±2 ohms
- 100 ohms to 5 megohms: ±2 %*
- Above 5 megohms: ±5 %

**Power Rating per Resistor**
- At 70 °C: 0.30 watt

**Power Temperature Derating Curve**

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**Popular Resistance Values (101, 102 Circuits)**

<table>
<thead>
<tr>
<th></th>
<th></th>
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<td>221</td>
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</table>

*: Add “F” after resistance code for ±1 % tolerance available from 100 Ω through 1M Ω, or add “D” after resistance code for ±0.5 % tolerance available from 100 Ω through 1M Ω.

**Non-standard values available, within resistance range.

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**Popular Resistance Values (104 Circuit)**

<table>
<thead>
<tr>
<th>Resistance</th>
<th>Code</th>
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<td>470</td>
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<tr>
<td>3,000</td>
<td>6,200</td>
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</table>

REV. 05/12

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Customers should verify actual device performance in their specific applications.