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 megarohms
- **Maximum Operating Voltage**
  - 100 V
- **Temperature Coefficient of Resistance**
  - ±100 ppm/°C below 50 Ω, ±250 ppm/°C above 2.2 megohms
- **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**
  - ±4R 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
- (43 = Molded SIP)
- Number of Pins
- (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 megarohm)
  - D = ±0.5 % (100 ohms - 1 megarohm)
- 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.

For Standard Values Used in Capacitors, Inductors, and Resistors, click here.

**WARNING** Cancer and Reproductive Harm

www.P65Warnings.ca.gov

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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**

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

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* 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.

Part number suffix examples: -103 = 10K Ω, ±2%; -103F = 10K Ω, ±1%; -103D = 10K Ω, ±0.5 %

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

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