**Features**

- RoHS compliant*
- High profile offers increased power handling
- Wide assortment of pin packages enhances design flexibility
- Ammo-pak packaging available
- Recommended for rosin flux and solvent clean or no clean flux processes
- Marking on contrasting background for permanent identification

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**4600H Series - Thick Film Conformal 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
- **Insulation Resistance**
  - 10,000 megohms minimum
- **Dielectric Withstanding Voltage**
  - 200 VRMS
- **Operating Temperature**
  - -55 °C to +125 °C

**Environmental Characteristics**

- **TESTS PER MIL-STD-202**
  - AR MAX.
- **Short Time Overload**
  - ±0.25 %
- **Load Life**
  - ±0.10 %
- **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
- **Body Material**
  - Epoxy resin
- **Standard Packaging**
  - Bulk, Ammo-pak available

**How To Order**

- **Model**
  - 4606 H - 101 - 222 __ LF
- **Number of Pins**
  - 101
- **Physical Configuration**
  - H = Thick Film High Profile
- **Electrical Configuration**
  - 101 = Bussed
  - 102 = Isolated
  - 104 = Dual Terminator
  - AP1 = Bussed Ammo**
  - AP2 = Isolated Ammo**
  - AP4 = Dual Ammo**
- **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 - 5 megohms)
- **Terminations**
  - All electrical configurations EXCEPT 104 & AP4: LF = Sn/Ag/Cu-plated (RoHS compliant)
  - ONLY electrical configurations 104 & AP4: L = Sn/Ag/Cu-plated (RoHS compliant)

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

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**Typical Part Marking**

Represents total content. Layout may vary.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>4606H-101-RC</td>
<td>6H-1-RC</td>
</tr>
<tr>
<td>4608H-102-RC</td>
<td>8H-2-RC</td>
</tr>
<tr>
<td>4610H-104-RC/RC</td>
<td>10H-4-RC/RC</td>
</tr>
</tbody>
</table>

**RC** = ohmic value, 3-digit resistance code.

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4600H Series - Thick Film Conformal SIPs

Isolated Resistor (102 Circuit)
Model 4600H-102
4, 6, 8, 10, 12 or 14 Pin

These models incorporate 2 to 7 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 4600H-101-RC
4 through 14 Pin

These models incorporate 3 to 13 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 4600H-104-R1/R2
4 through 14 Pin

The 4608H-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)**

<table>
<thead>
<tr>
<th></th>
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<td>100</td>
<td>180</td>
<td>181</td>
<td>1,800</td>
<td>182</td>
<td>15,000</td>
<td>153</td>
<td>120,000</td>
<td>124</td>
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<td>220</td>
<td>220</td>
<td>221</td>
<td>2,000</td>
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<td>270</td>
<td>271</td>
<td>2,200</td>
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<td>331</td>
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<tr>
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<td>105</td>
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* ±1 % tolerance is available by adding suffix code “F” after the resistance code.

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

Popular Resistance Values (104 Circuit)**

<table>
<thead>
<tr>
<th>Ohms</th>
<th>Code</th>
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</thead>
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<tr>
<td>R1</td>
<td>R2</td>
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<td>240</td>
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<td>180</td>
<td>270</td>
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</tr>
<tr>
<td>330</td>
<td>470</td>
</tr>
<tr>
<td>3,000</td>
<td>6,200</td>
</tr>
</tbody>
</table>

Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.