

BOURNS®

Features

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

For information on specific applications, download Bourns' application notes:

- [DRAM Applications](#)
- [Dual Terminator Resistor Networks](#)
- [R/2R Ladder Networks](#)
- [SCSI Applications](#)

4100R Series - Thick Film Molded DIPs

Product Characteristics

Resistance Range	10 ohms to 10 megohms
Maximum Operating Voltage	100 V
Temperature Coefficient of Resistance	50 Ω to 2.2 MΩ: ±100 ppm/°C below 50 Ω: ±250 ppm/°C above 2.2 MΩ: ±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	ΔR 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

Model	41 14 R - 1 - 152
(41 = Molded DIP)	
Number of Pins	
Physical Configuration	(R = Thick Film Low Profile)
Electrical Configuration	• 1 = Isolated • 2 = Bussed • 3 = 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	• LF = Tin-plated (RoHS compliant version) • Blank = Tin/Lead-plated

Consult factory for other available options.

Package Power Temp. Derating Curve

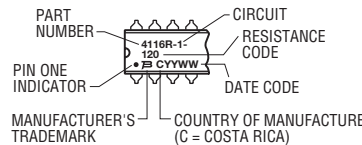


Package Power Rating at 70 °C

4108R	1.69 watts
4114R	2.00 watts
4116R	2.25 watts
4118R	2.50 watts
4120R	2.80 watts

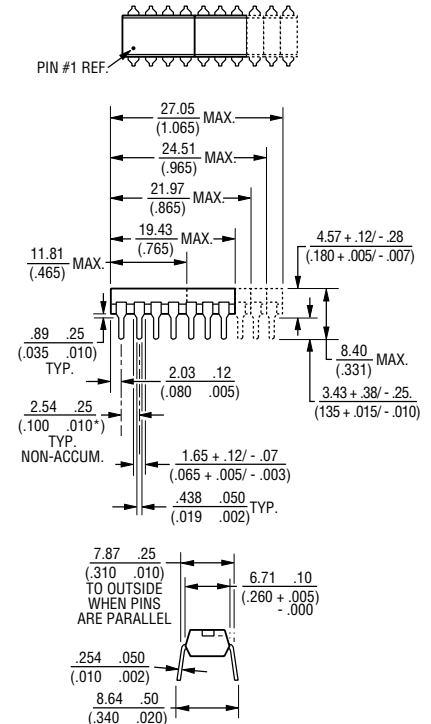
Typical Part Marking

Represents total content. Layout may vary.



For Standard Values Used in Capacitors, Inductors, and Resistors, [click here](#).

Product Dimensions



Governing dimensions are in 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.

*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.

Customers should verify actual device performance in their specific applications.

