

## Features

- RoHS compliant\* (see How to Order "Termination" option)
- Custom circuits available per factory

For information on thin film applications, download Bourns' [Thin Film Application Note](#).

# 4100T - Thin Film Molded DIP

### Product Characteristics

Resistance Range .....50 to 100K ohms  
 Resistance Tolerance  
 .....±0.1 %, ±0.5 %, ±1 %  
 Temperature Coefficient  
 .....±100 ppm/°C, ±50 ppm/°C,  
 ±25 ppm/°C  
 Temperature Range  
 .....-55 °C to +125 °C  
 Insulation Resistance  
 .....10,000 megohms minimum  
 TCR Tracking .....±5 ppm/°C  
 Maximum Operating Voltage.....50 V

### Environmental Characteristics

TESTS PER MIL-STD-202..... ΔR MAX.  
 Thermal Shock..... 0.1 %  
 Low Temperature Operation ..... 0.25 %  
 Short Time Overload..... 0.1 %  
 Resistance to Soldering Heat ..... 0.1 %  
 Moisture Resistance ..... 0.1 %  
 Mechanical Shock..... 0.25 %  
 Life ..... 0.5 %  
 High Temperature Storage..... 0.2 %  
 Low Temperature Storage..... 0.1 %

### Physical Characteristics

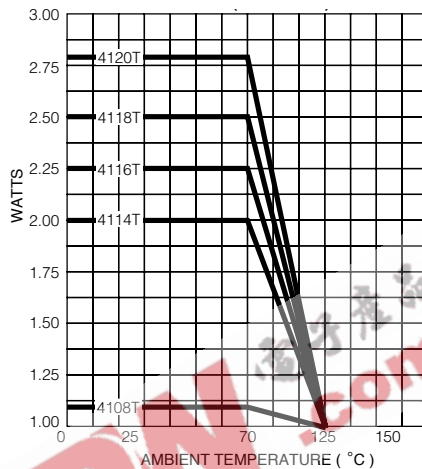
Lead Frame Material  
 .....Copper, solder coated  
 Body Material Flammability  
 .....Conforms to UL94V-0  
 Body Material .....Novolac Epoxy

### How To Order

**41 16 T - 2 - 2222 F A B**

Model \_\_\_\_\_  
 (41 = Molded Dip)  
 Number of Pins \_\_\_\_\_  
 Physical Config. \_\_\_\_\_  
 •T = Thin Film  
 Electrical Configuration \_\_\_\_\_  
 •2 = Bussed      •1 = Isolated  
 Resistance Code \_\_\_\_\_  
 •First 3 digits are significant  
 •Fourth digit represents the  
 number of zeros to follow.  
 Absolute Tolerance Code \_\_\_\_\_  
 •B = ±0.1%      •F = ±1%  
 •D = ±0.5%  
 Temperature Coefficient Code \_\_\_\_\_  
 •A = ±100ppm/°C    •C = ±25ppm/°C  
 •B = ±50ppm/°C  
 Ratio Tolerance (Optional) \_\_\_\_\_  
 •A = ±0.05% to R1    •B = ±0.1% to R1  
 •D = ±0.5% to R1  
 Terminations \_\_\_\_\_  
 •L = Tin-plated (RoHS compliant version)  
 •Blank = Tin/Lead-plated  
 Consult factory for other available options.

### Package Power Temp. Derating Curve

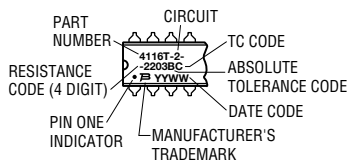


### Package Power Ratings at 70 °C

4108T .....1.09 watts  
 4114T .....2.00 watts  
 4116T .....2.25 watts  
 4118T .....2.50 watts  
 4120T .....2.80 watts

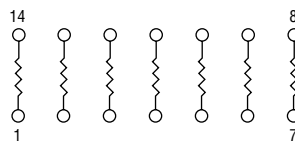
### Typical Part Marking

Represents total content. Layout may vary.



### Isolated Resistors (1 Circuit)

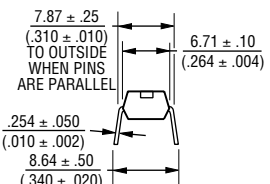
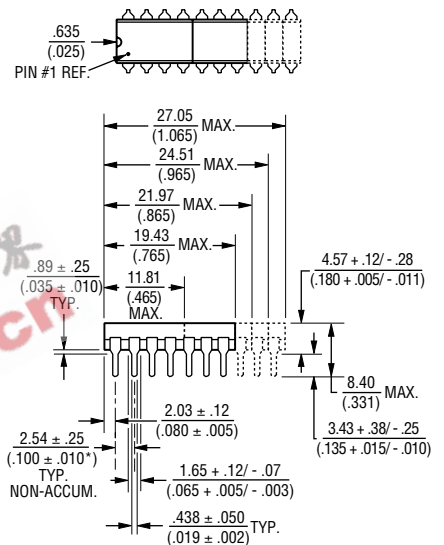
Available in 8, 14, 16, 18, and 20 Pin



These models incorporate 4, 7, 8, 9, or 10 thin-film resistors of equal value, each connected between a separate pin.

Power Rating per Resistor.....0.2 watt  
 Resistance Range.....50 to 100K ohms

### Product Dimensions

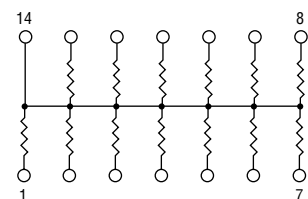


Governing dimensions are in metric. Dimensions in parentheses are inches and are approximate.

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

### Bussed Resistors (2 Circuit)

Available in 8, 14, 16, 18, and 20 Pin



These models incorporate 7, 13, 15, 17, or 19 thin-film resistors of equal value, each connected by a common pin.

Power Rating per Resistor.....0.12 watt  
 Resistance Range.....50 to 50K ohms

\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.