

## Features

- Lead free
- RoHS compliant\*
- Increased lead density
- Custom circuits available per factory

For information on thin film applications, download Bourns' Thin Film Application Note.

# 4400T - Thin Film Wide Body Gull Wing

## Product Characteristics

Resistance Range .....10 to 150K 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

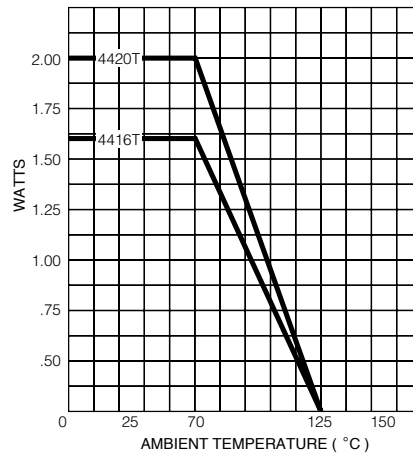
## Environmental Characteristics

TESTS PER MIL-STD-202 .....ΔR MAX  
Thermal Shock ..... 0.1 %  
Short Time Overload ..... 0.1 %  
Resistance to Soldering Heat ..... 0.1 %  
Moisture Resistance ..... 0.5 %  
Life ..... 0.5 %

## Physical Characteristics

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

## Package Power Temp. Derating Curve

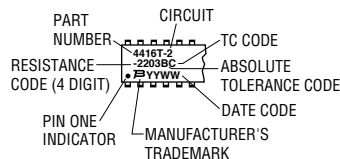


## Package Power Ratings at 70 °C

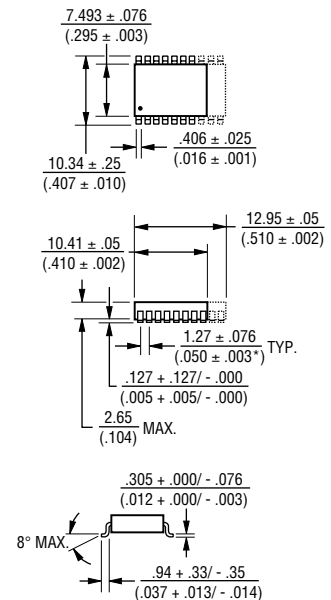
4416T .....1.60 watts  
4420T .....2.00 watts

## Typical Part Marking

Represents total content. Layout may vary.



## 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.

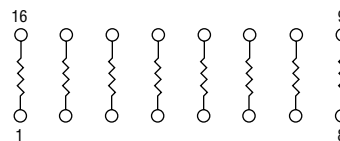
## How To Order

**44 16 T - 2 - 2222 F A B L**

Model \_\_\_\_\_  
(44 = SOL Wide Body Gull Wing)  
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 •D = ±0.5% to R1  
•B = ±0.1% to R1  
Termination \_\_\_\_\_  
L = Tin-plated (lead free)

## Isolated Resistors (1 Circuit)

Available in 16 and 20 Pin

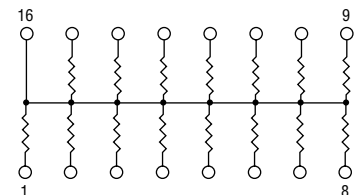


These models incorporate 8 or 10 thin-film resistors of equal value, each connected between a separate pin.

Power Rating per Resistor .....0.15 watt  
Resistance Range .....10 to 150K ohms

## Bussed Resistors (2 Circuit)

Available in 16 and 20 Pin



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

Power Rating per Resistor .....0.10 watt  
Resistance Range .....10 to 75K ohms

Consult factory for other available options.

REV. 01/05  
\*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.