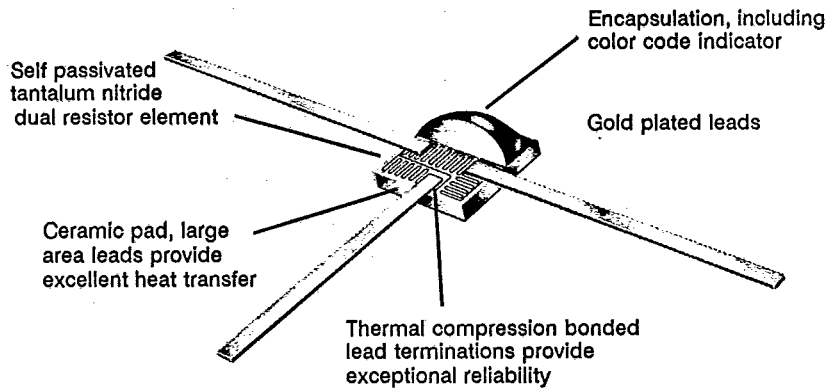




TANFILM SUBMINIATURE DUAL NETWORK

TANTEE SERIES

- Subminiature (0.075" x 0.075")
- Dual resistor, center lead common
- Available with custom testing
- Ultra precision - Absolute tolerance to $\pm 0.1\%$, - Ratios to 0.1%
- Superior temperature performance
Absolute T.C. to ± 25 ppm/ $^{\circ}\text{C}$
T. C. tracking: 5 ppm/ $^{\circ}\text{C}$ standard
- .25 watt power dissipation



The TaNTee Series of TaNFilm resistor networks provides a miniature, two-resistor network adaptable to many circuit requirements. The tantalum nitride film resistors are deposited on a 25 mil thick ceramic chip .075" x .075", and are protected by a rugged epoxy coating. Gold

plated copper leads are bonded to termination pads on the ceramic chip, resulting in a strong, reliable lead connection. Tantalum nitride is an extremely stable metal film resistor material capable of high operating power levels and also exceptional environ-

mental performance. The TaNTee dual resistor's physical size and construction make it ideally suited for high frequency applications. The excellent TC tracking of the two resistors on the chip provides a very stable voltage ratio over temperature.

SPECIFICATIONS:

Resistance Range, each R:

10 Ω to 10K Ω

(See chart and schematic below)

Power Rating: 1/4 watt @ 85 $^{\circ}\text{C}$

Resistor Tolerance:

Absolute Tolerance -

$\pm 5\%$ standard,

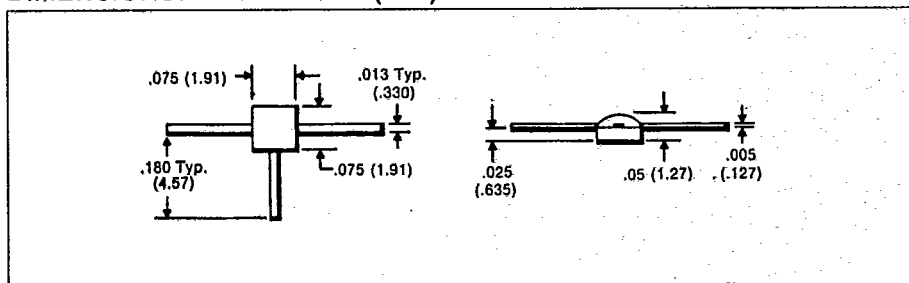
$\pm 1\%$ available

Molsture Resistance, ΔR :

$\pm 0.4\%$ max.

Noise: -20 db max.

DIMENSIONS: INCHES and (mm):



Marking: Part marking on white package. Piece part color dot available on special order.

Thermal Shock, ΔR : $\pm 0.25\%$ max.

(5 cycles, -65 $^{\circ}\text{C}$ to +125 $^{\circ}\text{C}$)

Temperature Coefficient:

Absolute - to ± 25 ppm/ $^{\circ}\text{C}$

Tracking - to 5 ppm

Load Life, ΔR : $\pm 0.5\%$ max.

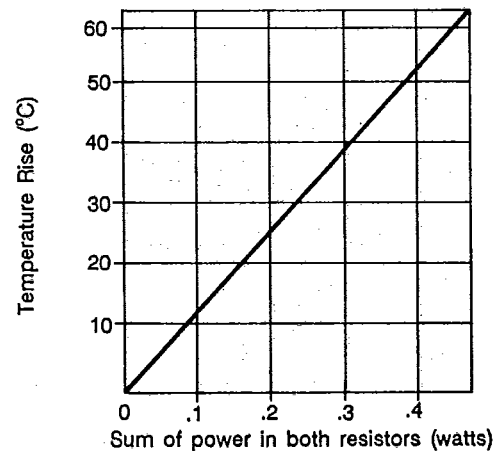
(1000 hrs. @ 70 $^{\circ}\text{C}$ @ rated load)

Short Time Overload, ΔR :

$\pm 0.1\%$ max.

(2.5 x rated voltage for 5 seconds)

TEMPERATURE RISE:



STANDARD CIRCUIT:



HOW TO ORDER

Sample Part No.:

Model **Characteristic** **Resistance** **Code**
2998 01 1001 B

Model

2998 = 3 leaded version

2999 = 2 leaded version

Characteristic

| TCR Code | (ppm/ $^{\circ}\text{C}$) |
|----------|----------------------------|
| 01 | ± 100 |
| 02 | ± 50 |
| 03 | ± 25 |

Resistance

Value of R₁ when R₁ = R₂
Standard MIL resistance code

If R₁ does not equal R₂ consult factory.

Example: 1001 = 1000 Ω

Tolerance

Standard MIL tolerance code

- B = $\pm 0.1\%$
- C = $\pm 0.25\%$
- D = $\pm 0.5\%$
- F = $\pm 1\%$
- G = $\pm 2\%$