

The content of this specification may change without notification 11/2/07

Custom solutions are available.

HOW TO ORDER

THP-A 10 D F M

Packaging

M = tape/reel
B = bulk

Tolerance (%)

F = ±1%

Impedance

C = 50Ω D = 75Ω

Rated Power W

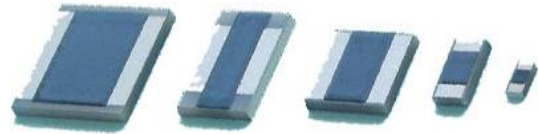
5W = 05 100W = 100
10W = 10 250W = 250
50W = 50

Termination Configuration

A, B, C, or D

Series

High Power RF Terminator



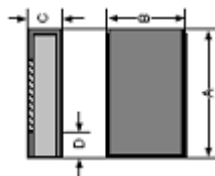
FEATURES

- High frequency operation up to 3 GHz
- From 5W to 250W dissipation on Aluminum Nitride substrate
- Rugged thin film element provides performance stability over time and temperature.
- Four termination configurations allow maximum versatility for different circuit designs and construction.

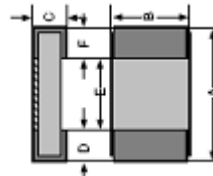
APPLICATIONS

- Satellite Communications
- Isolator/Circulators
- Cell Base Stations
- High Power Microwave/RF Power Amplifiers

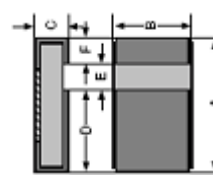
SCHEMATIC – Termination Configuration



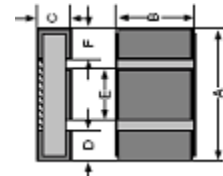
THP-A



THP-B



THP-C



THP-D

DIMENSIONS (mm)

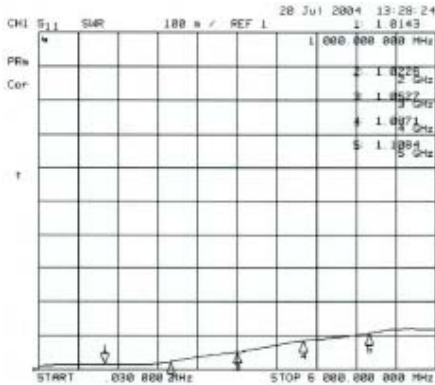
| Series | Configuration | Power | A | B | C | D | E | F |
|----------|---------------|-------|------|------|------|------|------|------|
| THP-A05 | A | 5 W | 2.54 | 1.27 | 1.00 | 0.60 | - | - |
| THP-A10 | | 10 W | 5.08 | 2.54 | 1.00 | 1.00 | - | - |
| THP-A50 | | 50 W | 5.08 | 5.08 | 1.20 | 1.00 | - | - |
| THP-A100 | | 100 W | 8.89 | 8.89 | 1.20 | 1.20 | - | - |
| THP-A250 | | 200 W | 9.52 | 9.52 | 1.20 | 1.20 | - | - |
| THP-B05 | B | 5 W | 2.54 | 1.27 | 1.00 | 0.60 | 1.00 | 0.60 |
| THP-B10 | | 10 W | 5.08 | 2.54 | 1.00 | 1.00 | 3.00 | 1.00 |
| THP-B50 | | 50 W | 5.08 | 5.08 | 1.20 | 3.00 | 3.00 | 1.00 |
| THP-B100 | | 100 W | 8.89 | 8.89 | 1.20 | 1.20 | 2.40 | 1.20 |
| THP-B250 | | 200 W | 9.52 | 9.52 | 1.20 | 1.20 | 7.10 | 1.20 |
| THP-C50 | C | 50 W | 5.08 | 5.08 | 1.20 | 3.00 | 1.08 | 1.00 |
| THP-C100 | | 100 W | 8.89 | 8.89 | 1.20 | 3.40 | 1.20 | 1.20 |
| THP-C250 | | 200 W | 9.52 | 9.52 | 1.20 | 7.10 | 1.20 | 1.20 |
| THP-D50 | D | 50 W | 5.08 | 5.08 | 1.20 | 1.00 | 2.00 | 1.00 |
| THP-D100 | | 100 W | 8.89 | 8.89 | 1.20 | 1.20 | 2.40 | 1.20 |
| THP-D250 | | 200 W | 9.52 | 9.52 | 1.20 | 1.20 | 6.00 | 1.20 |

SPECIFICATIONS and PERFORMANCE

| Item | THP- A/B05 | THP-A/B10 | THP-A/B/C/D50 | THP-A/B/C/D100 | THP-A/B/C/D250 |
|-------------------------------|----------------|------------|---------------|----------------|----------------|
| Resistance | 50Ω or 75Ω | 50Ω or 75Ω | 50Ω or 75Ω | 50Ω or 75Ω | 50Ω or 75Ω |
| VSWR @ 1.0GHz | 1.15 | 1.15 | 1.2 | 1.2 | 1.2 |
| Power Rating @ 100°C | 5 W | 10 W | 50 W | 100 W | 250 W |
| Pulse Power < 1 second | 10 W | 60 W | 100 W | 200 W | 500 W |
| Thermal Resistance | 12.5°C/W | 6.5°C/W | 2.5°C/W | 1.3°C/W | 0.5°C/W |
| Resistance | 50Ω or 75Ω | | | | |
| Tolerance | ±1% | | | | |
| Operating/Storage Temperature | -55°C ~ +155°C | | | | |
| Absolute TCR | ±50ppm | | | | |

SII & VSWR DATA

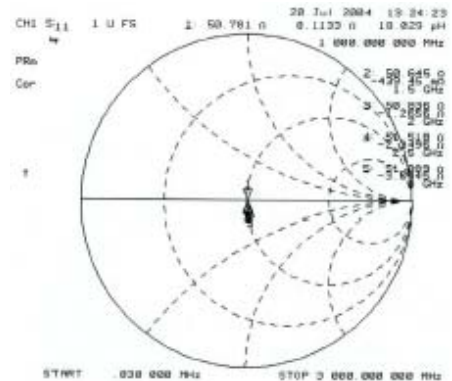
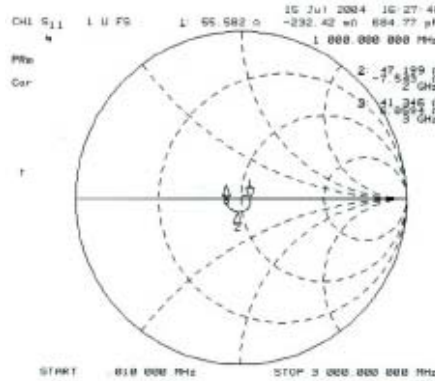
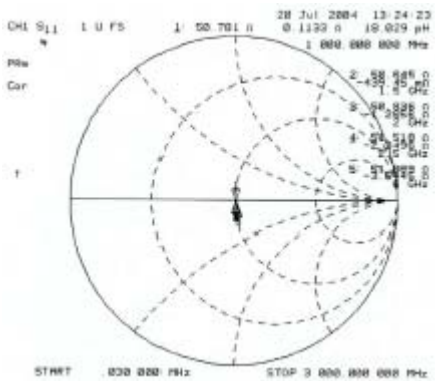
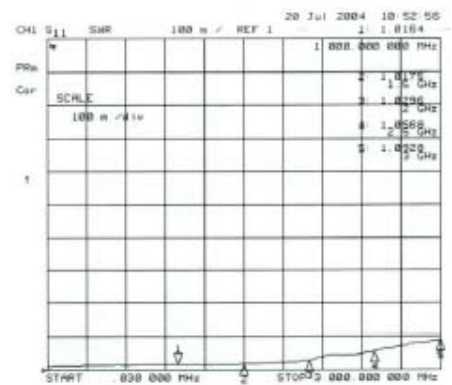
THP-A05DFM



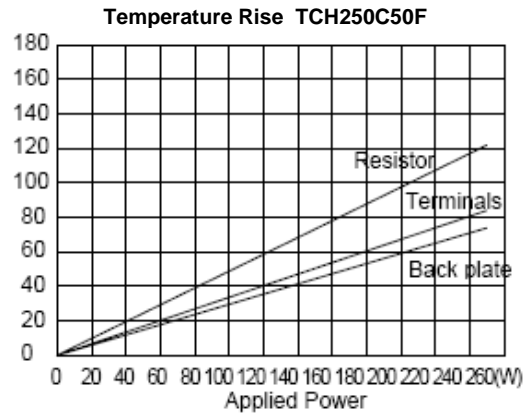
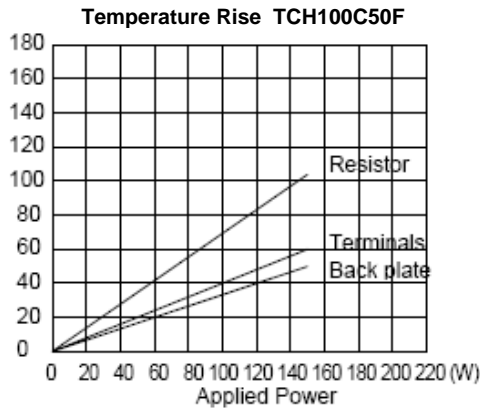
THP-A100DFM



THP-A250DFM



APPLIED POWER



Notes:

1. Custom solutions are available. Other resistance values and substrate thicknesses are available. Please contact AAC with your customer order requirement.
2. Power Rating assumes that the chip is attached on a metal insulated PC board
3. Solder joint design should assure a solder thickness within 50 micron meters.

DERATING CURVE

