VISHAY

The DNA of tech.®

TFPT - Nickel Thin Film PTC Thermistors with Linear Tracking

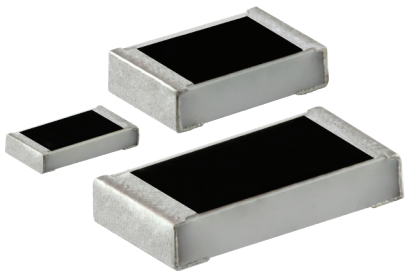
100 % Lead (Pb)-Free, Standard SMD Sizes, High Stability

ADVANTAGE

New lead (Pb)-free coating, which is environmental friendly and offers better high temperature resistance.

KEY PRODUCT FEATURES

- ✓ TCR at 25 °C = 4100 ppm/K
- ✓ High stability over the complete temperature range of -55 °C to +150 °C
- ✓ AEC-Q200 qualified



RESOURCES

Order Samples | Product Page | Contact Us | Design Tools | Infographics

MARKETS AND APPLICATIONS

CONNECTIVITY

- Temperature compensation in wireless communication modules
- Thermal monitoring in IoT devices
- Overtemperature protection in networking equipment

CONSUMER

- Temperature sensing in smart home thermostats and HVAC systems

MOBILITY

- Battery pack temperature monitoring
- Thermal management in power electronics
- Temperature compensation in LiDAR, radar, and camera modules for ADAS
- Overtemperature protection in charging stations

INDUSTRIAL

- Motor winding temperature control
- Thermal compensation in precision manufacturing sensors

MEDICAL

- Body temperature sensing in wearable medical devices
- Thermal regulation in imaging systems

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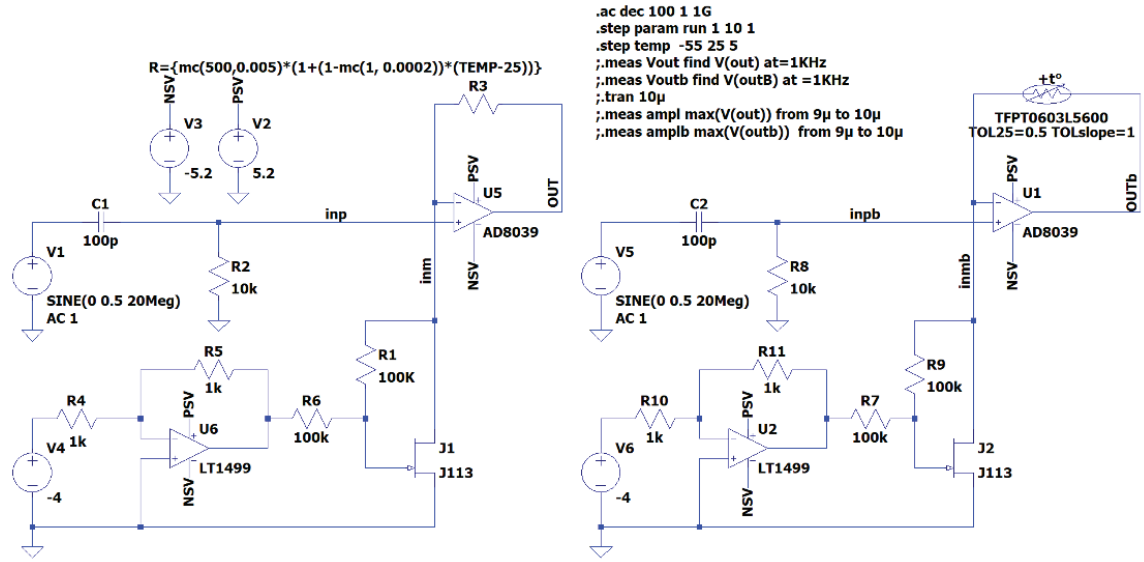
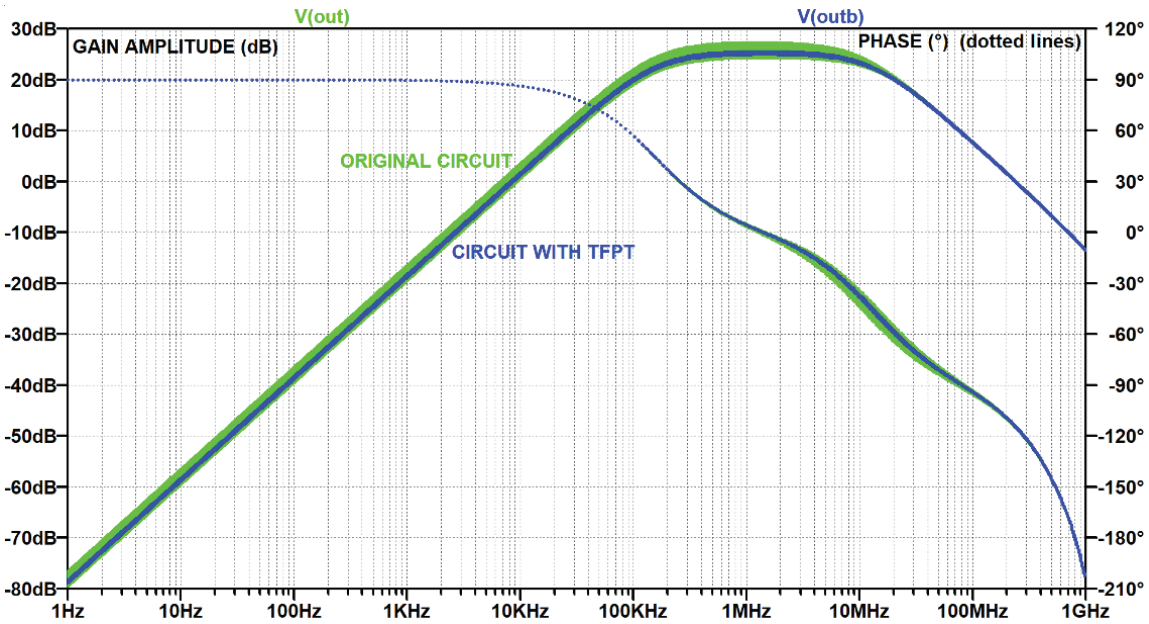
ADDITIONAL BENEFITS

- Low failure rate ≤ 0.1 FIT (x10-9/h)
- Wide R25 selection range from 100 Ω to 10 KΩ
- Fail-safe PTC sensing technology

TEMPERATURE COMPENSATION EXAMPLE

JFET-based amplifier stage, temperature noise reduction by the TFPT0603 as an alternative to KTY silicon resistors





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