# **ABRIDGED DATA SHEET**

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#### EVALUATION KIT AVAILABLE

#### **MAX2180A**

### AM/FM Car Antenna Low-Noise Amplifier

#### **General Description**

The MAX2180A is a highly integrated AM/FM variablegain low-noise amplifier ideal for use in automotive active antenna applications. The device features separate AM and FM signal paths, each providing 30dB of gain range, controlled by individual on-chip power detectors. The AM signal path covers a 148kHz to 30MHz input frequency range, while the FM signal path covers 65MHz to 162.5MHz.

The device integrates a voltage regulator and pass transistor, allowing operation using battery voltages in the +6V to +24V range. On-chip thermal protection automatically limits junction temperatures during extreme thermal conditions.

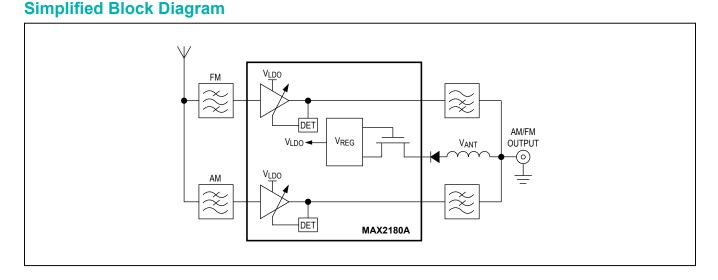
The device is available in a small, 4mm x 4mm, TQFN package and operates over the extended industrial temperature range (-40°C to +85°C).

#### **Features**

- +6V to +24V Supply Voltage Range
- Integrated AGC Function Eliminates External Pin Diodes
- High Dynamic Range
- Low-Noise, Sub 3dB Noise Figure
- Low External BOM
- Integrated Thermal Protection
- Small Package (4mm x 4mm TQFN)
- Integrated Pass Device and Linear Regulator
- Integrated Power Detector
- Integrated Antenna Sense

#### Applications

• Automotive Active Antenna



Ordering Information appears at end of data sheet.



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MAX2180AEVKIT# MAX2180AETG/V+ MAX2180AETG/V+T