General Description

The EXP8602 is a GaAs MMIC power amplifier designed for 50-Ohm systems, and specified for operation in the 81 to 86 GHz range of E-Band.

The EXP8602 enables delivery of 23 dBm RF output power when driven to 3 dB of gain compression, and maintains good linearity well below the onset of gain compression. Typical small-signal gain is 19 dB with flatness of ±0.75 dB over a 1.25 GHz window. DC power consumption is as low as 2.2 W.

The EXP8602 also provides a built-in E-Band power detector, and internally de-couples DC from RF input and output ports to simplify system-level design.

Features

- 81 to 86 GHz Frequency Range
- 19 dB Nominal Gain
- 32.5 dBm Nominal IP_3
- 21.5 dBm Nominal P_{-1dB}
- 23 dBm Nominal P_{-3dB}
- 4 V, 550 mA Nominal Quiescent Drain Bias
- 4.17 mm × 1.87 mm Die Size

Ordering Information

Part	Description
EXP8602-DNT	RoHS compliant bare die in gel packs

For price, delivery schedules, and to place orders, please contact IDT: www.IDT.com/go/sales

Applications

- Point-to-point E-band radios
- Test and measurement equipment

Device Diagram

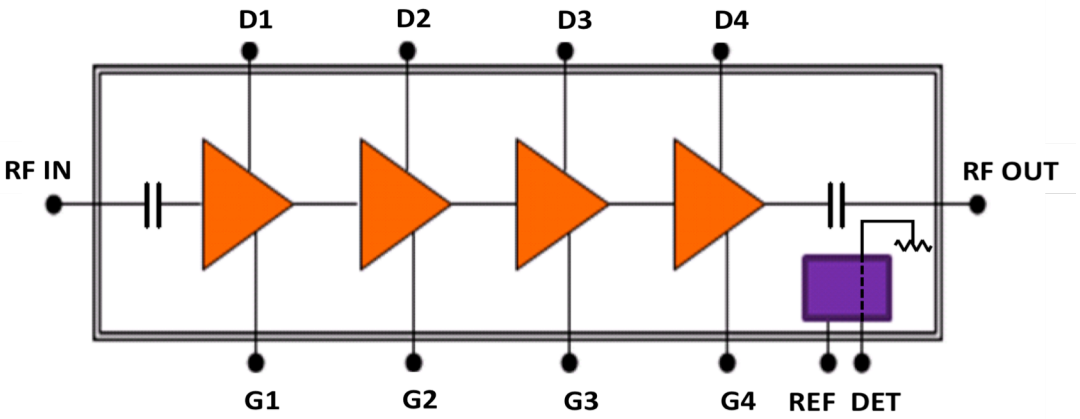

Figure 1: Device diagram

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