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.

Applications

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

Features

• 81 to 86 GHz Frequency Range
• 19 dB Nominal Gain
• 32.5 dBm Nominal IP₃
• 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

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
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<tbody>
<tr>
<td>EXP8602-DNT</td>
<td>RoHS compliant bare die in gel packs</td>
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For price, delivery schedules, and to place orders, please contact IDT: www.IDT.com/go/sales

Device Diagram

![Device Diagram](image-url)
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