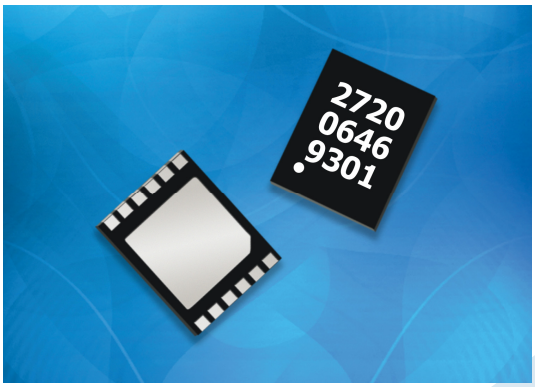
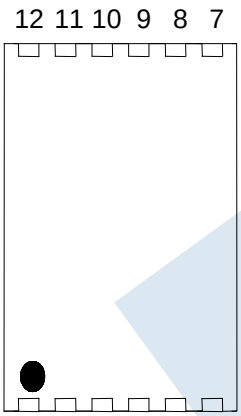
TGA2720-SM

Advance Data Sheet

2.5 GHz 802.16e WiMax Amplifier





Pin	Description
1	RFin
2,4,5,10,12	NC
3	Gstep
6	RFout
7	Psense
8	Vd3
9	Vd1,2
11	PAen

PARAMETER	NOMINAL**	UNITS
Operating Frequency Range	2.3 – 2.7	GHz
Small Signal Gain	30	dB
Input Return Loss	10	dB
Output Return Loss	10	dB
Error Vector Magnitude @ +22 dBm Output Burst Power	2.5	%
Power Added Efficiency @ +22 dBm, Output Burst Power	16	%
Drain Voltage	3.3	V
Drain Current	120	mA
PA enable Voltage	2.8	V
Gain Step Voltage (Hi Gain / Low Gain)	0 / 3	V

** Using an IEEE 802.16e WiMAX signal w/ 64 QAM & 14 MHz BW

Key Features

- Frequency Range: 2.3 – 2.7 GHz
- Gain: 30 dB
- Return Loss: 10 dB
- 22 dBm Pout, 16% PAE @ 2.5% EVM (IEEE 802.16e WiMAX signal: 64-QAM, 14 MHz BW)
- Bias: Vd = 3.3 V @ 120 mA
- Technology: E/D pHEMT
- Package Dimensions: 2.85 x 3.6 x 0.45 mm

Primary Applications

- WiMAX / WiBro mobile wireless communication systems
- High Power 802.11b/g

Product Description

The TriQuint TGA2720-SM is a high linearity MMIC for 2.3 & 2.5 GHz WiMAX IEEE 802.16e mobile applications. The part is designed using TriQuint's proven standard E/D pHEMT production process.

The TGA2720-SM delivers 22 dBm linear output power at 2.5% EVM with 30 dB associated gain and 16% PAE. The TGA2720-SM employs a gate bias temperature compensation circuit for maintaining constant operating current over temperature, an integrated power detector, plus a 25dB step attenuator. The TGA2720-SM utilizes a positive power supply for both gate and drain for operation simplicity.

The TGA2720-SM is lead-free & RoHS compliant.

Datasheet subject to change without notice.