

Preliminary DATA SHEET

GCM3827: 3600 to 3800MHz High Linearity 27dBm Power Amplifier

Product overview

GCM3827 is a three-stage HBT small cell power amplifier for indoor cellular base stations. It works at 3600~3800 MHz (B42,n78). This PA can deliver 27dBm 5G output power with ACPR below -47dBc and power gain higher than 30dB

Key Features

- 3600MHz – 3800MHz
- 31dB Gain
- 11% PAE at 27dBm output power
- Below -47dBc ACPR at 27dBm output power w/o DPD with 100M 5G NR signal
- Input/output internally matched to 50Ohm
- Integrated temperature compensation circuits
- Compact and low-cost 7mm x 7mm LGA package (MSL3, 260°C per JEDEC J-STD-020)
- ESD Level: HBM 1000V; CDM 1000V
- ROHS compatible

Applications

- FDD and TDD 2G/3G/4G LTE/5G NR systems
- 3GPP band n78 for 5G base-station application
- Driver amplifier for micro-base and macro-base stations
- Active antenna array and massive MIMO
- Customer Premises Equipment (CPE)



Figure 1. 14pin 7 x 7 mm Laminate Package

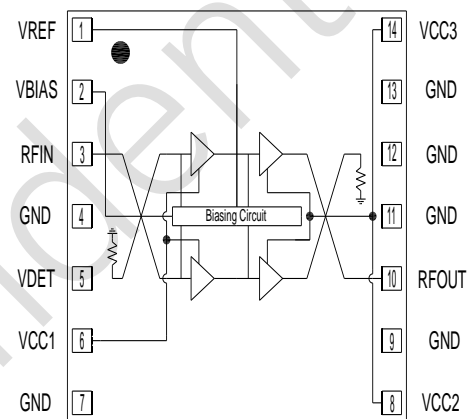


Figure 2. GCM3827 Function Block Diagram

Table 1. Pin-to-Pin Compatible PA Family

Part Num	Frequency (MHz)	3GPP Band
GCM1828	1710-2170	Band 1,2,3, n1,2,3
GCM2627	2300-2690	Band 40,41, n40,41
GCM3527	3300-3600	Band 42, n78

Ordering Information

Part No.	Description
GCM3827	3600-3800MHz 27dBm linear PA, 7' Reel with 3000pcs