

3V HBT TDMA Power Amplifier IC

TQ7125

Selected Electrical Characteristics

Test Conditions: $V_{CC} = +3.5V$, $T_C = 25^\circ C$, $V_{bias} = 2.75V$

Parameter		Min.	Typ.	Max.	Units
Usable Frequency Range		824		849	MHz
TDMA Output Power			29.5		dBm
TDMA Power Added Efficiency			47		%
ACP, Pout = +29.5 dBm			-30		dBc
ALT, Pout = +29.5dBm			-52		dBc
Large Signal Gain			27		dB
Small Signal Gain			26.5		dB
Receive Band Noise			-92		dBm/30KHz
Quiescent Current, uses V_{mode} Switching	AMPS Mode		55		mA
	TDMA Mode		70		mA
V_{mode} , Externally Switched.	AMPS Mode	0	0	0.3	V
	TDMA Mode	2.4	2.7	3.0	V
Second Harmonic, P_{OUT} =+29.5 dBm			-30		dB
Third Harmonic, P_{OUT} =+29.5 dBm			-40		dB
AMPS Output Power			29.5		dBm
AMPS Power Added Efficiency			47		%

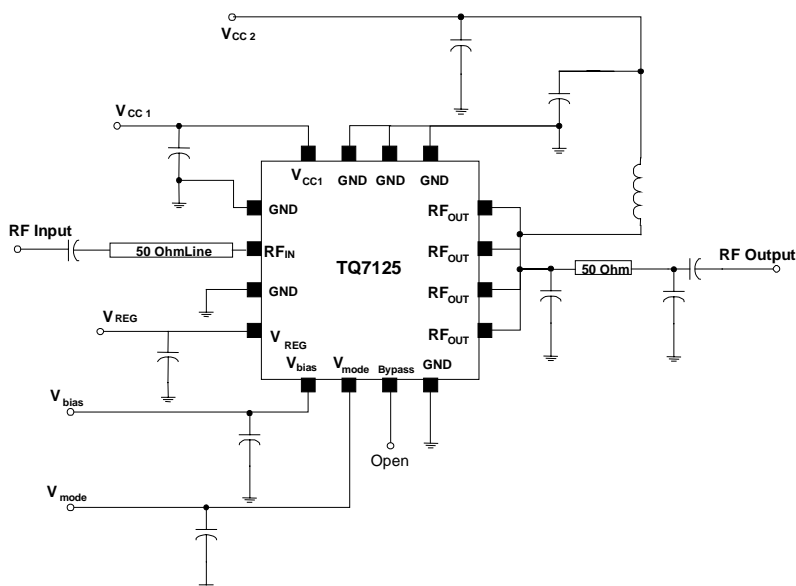
Primary Application(s)

- IS-136 Mobile Phones
- AMPS Mobile phones
- Dual Mode Mobile phones
- CDPD Modems

Key Features

- High Efficiency
- Low Quiescent Current, Mode Selectable
- Small size: 3x3 mm leadless package
- Few external components
- Excellent ACP Performance
- Single +2.7V Supply

Application Circuit, US Cellular Band



Package: 3x3 mm

Leadless 16 pin

