

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, $P_{out} = +29.5$ dBm		-30		dBc	
ALT, $P_{out} = +29.5$ dBm		-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		%	

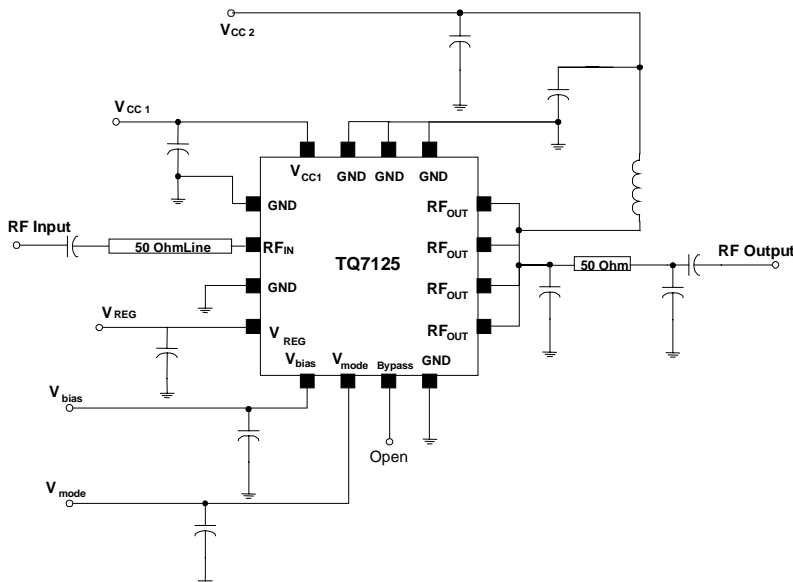
Primary Application(s)

- 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

