

Features:

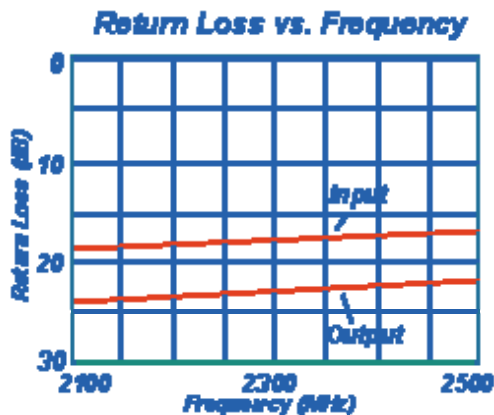
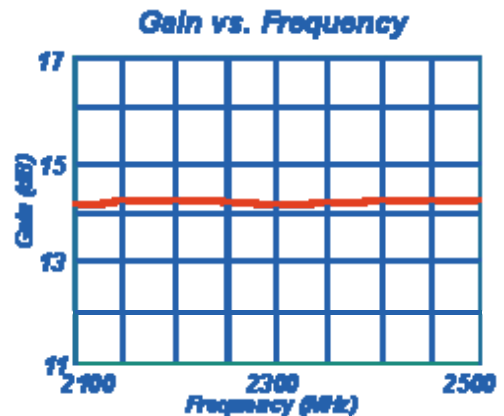


- 1.2:1 Typical Output VSWR
- +42 dBm Typical IP3
- +26 dBm Typical P1dB
- 14 dB Typical Gain
- Single Positive Bias
- Surface Mount Package

The MPS 2125A9D-02 is a high quality linearity modular amplifier designed to meet the ultra-linear transmitter driver requirements for commercial IMT 2000 Wireless Local Loop (WLL) applications. Key advantages are low inter-modulation performance for multi-carrier or wideband CDMA systems (IMD3 -70 dBc typical) and exceptionally low input/output return loss for ease of integration.

Electrical Specifications @ 25°C, V_{dd} = 7.5 V, Z_o = 50 ohms

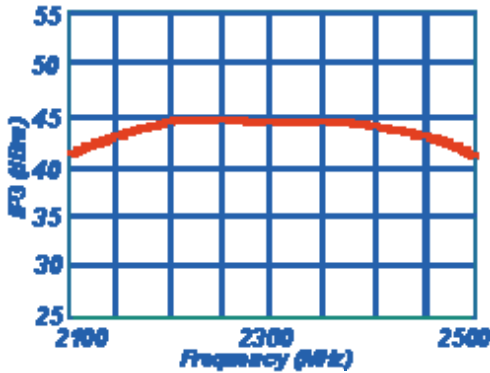
SYMBOL	PARAMETERS	Min	Typical	Max	Unit
Freq.	Frequency Range	2100		2500	MHz
SSG	Small Signal Gain	13	14		dB
P1 dB	Pout at 1 dB Comp Point	+25.0	+26.0		dBm
IP3	Third-Order Intercept	+41.0	+42.0		dBm
VSWR	VSWR (Input/Output)		1.4:1/1.2:1	1.5:1	
GOF	Gain Var. over Frequency		± 0.20	± 0.50	dB
GOT	Gain Var. over Temp		-0.015		dB/°C
I _{dd}	DC Current		230	320	mA



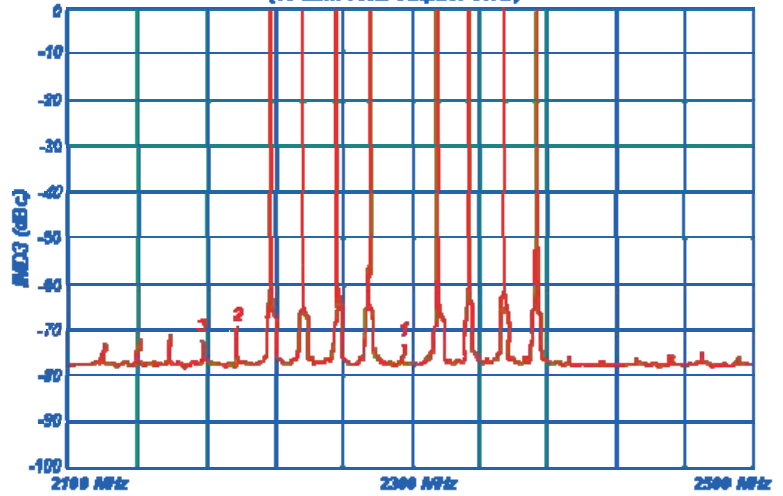
Absolute Maximum Ratings

Maximum Bias Voltage	8.0 V
Maximum Continuous RF Input Power	+25 dBm
Maximum Peak Input Power	+27 dBm
Maximum Case Operating Temperature	+85 °C
Maximum Storage Temperature	- 65 to + 150 °C

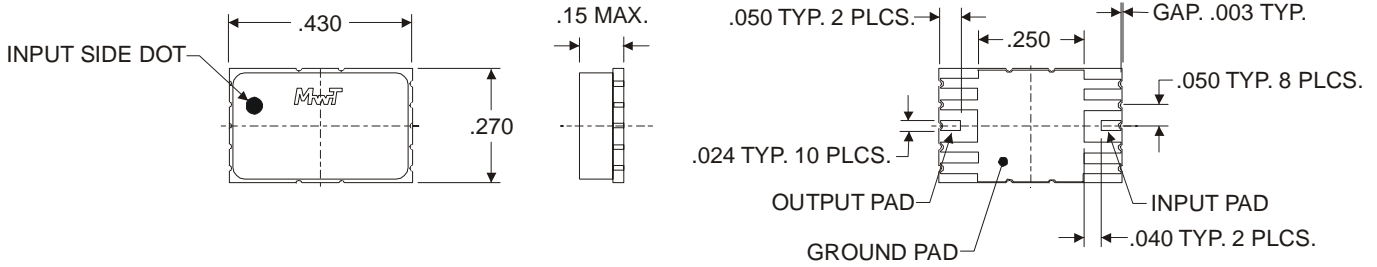
IP3 at 13 dBm/ Tone



8-Tone IMD Testing (10 dBm Total Output Power)



Outline Diagram



Application Circuit

