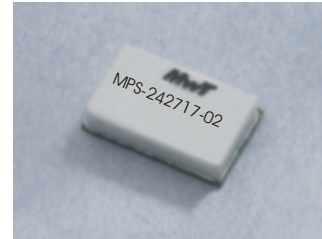


Features:

- 45 dBm IP3
- 13 dB Gain
- +28.0 dBm P1dB
- Single Positive Bias
- Leadless Surface Mount Package
- EVM < 1.0% at 20 dBm



Description:

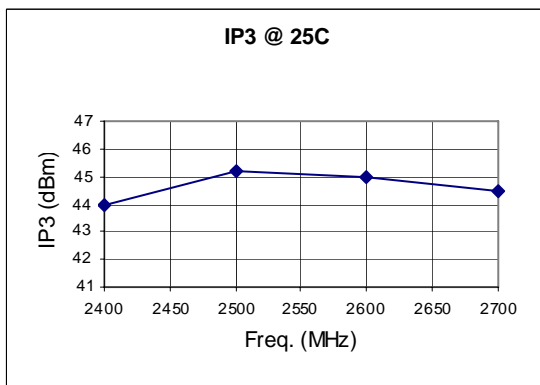
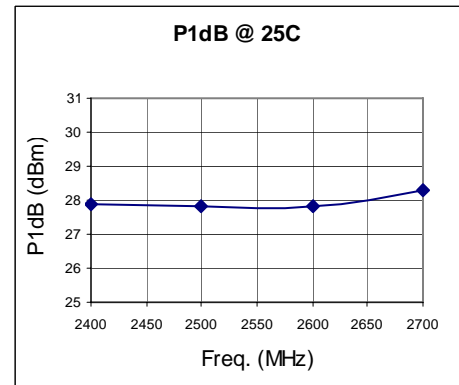
The WPS-242717-02 is a low cost high linearity modular amplifier designed to meet the ultra-linear transmitter driver requirements for 802.16 WiMax linear driver applications and commercial 2G, 2.5G, 3G, GSM, TDMA, EDGE, UMTS, WCDMA, CDMA2000, and TD-SCDMA applications. Key advantages are low EVM performance for 802.16 WiMax applications and low intermodulation performance for multi-carrier and CDMA systems together with exceptionally low input/output return loss for ease of integration.

Electrical Specifications:

- @ 25°C, Vdd = 6.0 to 7.0 V, Zo = 50 ohm

SYMBOL	PARAMETERS	Min	Typ	Max	Unit
Freq.	Frequency Range	2400		2700	MHz
SSG	Small Signal Gain	12.0	13.0		dB
P1 dB	Pout at 1 dB Comp Point		+28.0		dBm
IP3 (1)	Third-Order Intercept	42.0	45.0		dBm
VSWR	VSWR (Input/Output)		2.0:1		
GOF	Gain Var. over Frequency		± 0.25	± 0.50	dB
GOT	Gain Var. over Temp		-0.015		dB/°C
Idd	DC Current		300	350	mA

(1) Two tone test @ 13 dBm/tone, centered at 2,400 MHz with 20 MHz separation.

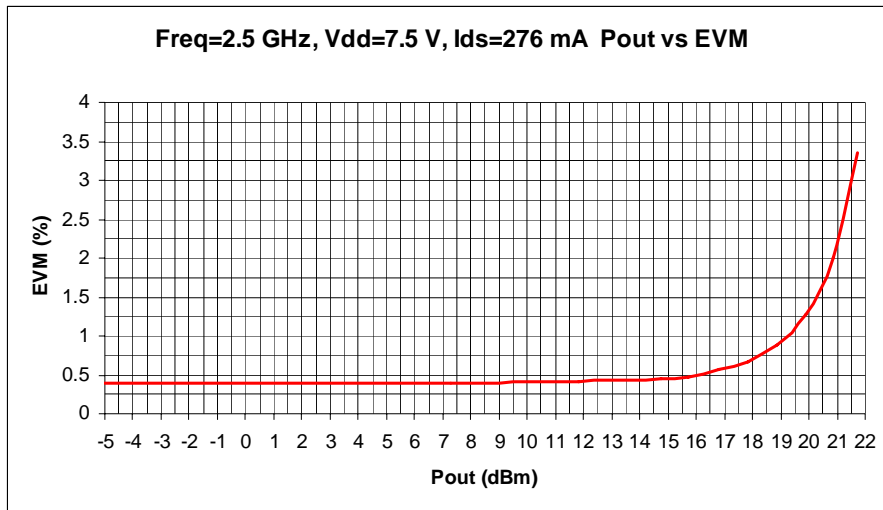


Absolute Maximum Ratings

Maximum Bias Voltage	8.0 V
Maximum continuous RF Input Power	950 mW
Maximum Peak Input Power	1400 mW
Maximum Case Operating Temperature	+ 85 °C
Maximum Storage Temperature	- 65 °C to + 150 °C

Typical Performance at 25°C (measurements taken in production test fixture)

The test signal is downlink WiMAX 802.16d and includes the preamble, FCH and QPSK, 16 QAM and 64 QAM. The demodulator is programmed to measure the output power and EVM for 64 QAM. The EVM error is the accumulated error from the modulator and WPS amplifier. The EVM floor for the modulator is 0.4%. At 19 dBm the WPS amplifier contributes less than 1% EVM.



IEEE 802.16 - 2004			
Frequency:	2.5 GHz	Signal Level:	17.9 dBm
Sweep Mode:	Continuous	External Att:	0 dB
Burst Type:	OFDM DL Burst	Trigger Mode:	Power
		Trigger Offset:	-10 μ s
		Modulation:	64QAM3/4
		No Of Data Symbols:	1/2425

