

Features:



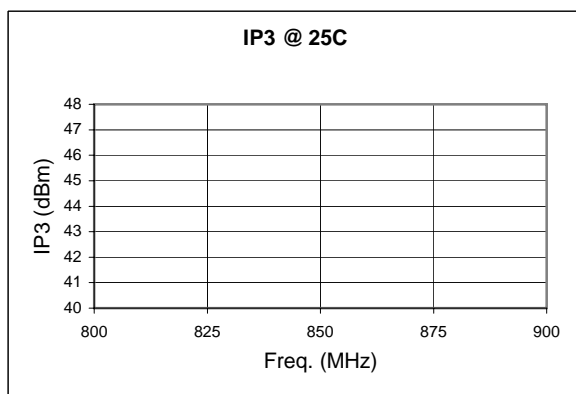
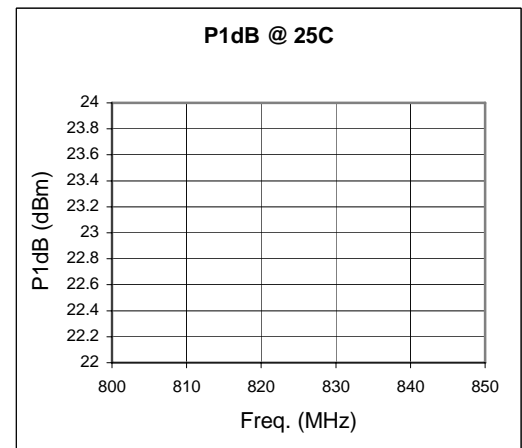
- 0.8 dB NF
- 13.5 dB Gain
- +23 dBm P1dB

- Single Positive Bias
- Leadless Surface Mount Package

The MPS-080817N-02 is a low cost high linearity modular amplifier designed to meet the ultra-linear transmitter driver requirements for commercial 2G, 2.5G, 3G, GSM, TDMA, EDGE, UMTS, WCDMA, CDMA2000, and TD-SCDMA applications. Key advantages are low intermodulation performance for multi-carrier and CDMA systems 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	805		831	MHz
SSG	Small Signal Gain	12.0	13.5		dB
P1 dB	Pout at 1 dB Comp Point		+23.0		dBm
IP3	Third-Order Intercept		36.0		dBm
NF	Noise Figure		0.8	1.1	dB
VSWR	VSWR (Input/Output)		2.0:1		
GOF	Gain Var. over Frequency		± 0.2	± 0.5	dB
GOT	Gain Var. over Temp		-0.015		dB/°C
I _{dd}	DC Current		180	250	mA

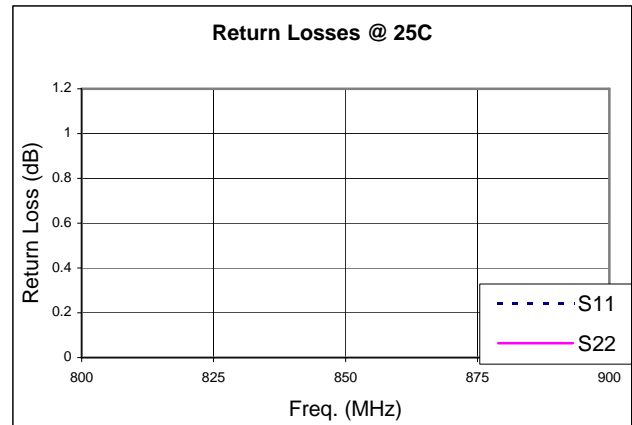
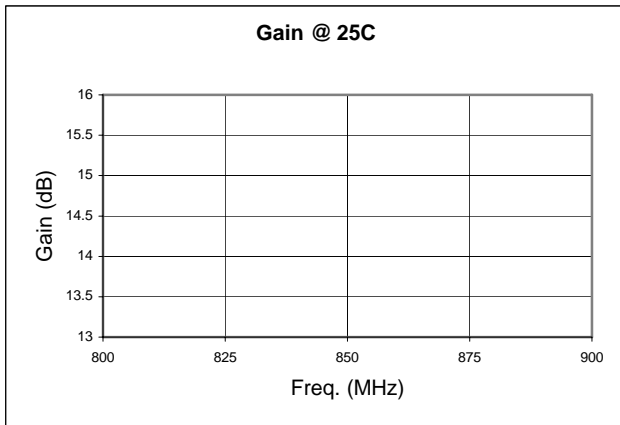


Absolute Maximum Ratings

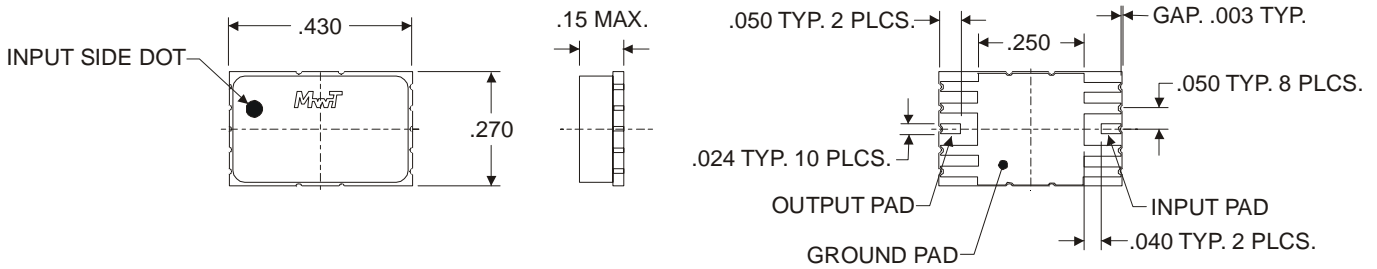
Maximum Bias Voltage	7.0 V
Maximum Continuous RF Input Power	+25 dBm
Maximum Peak Input Power	+27 dBm
Maximum Case Operating Temperature	+85 °C
Maximum Storage Temperature	- 65 to + 150 °C

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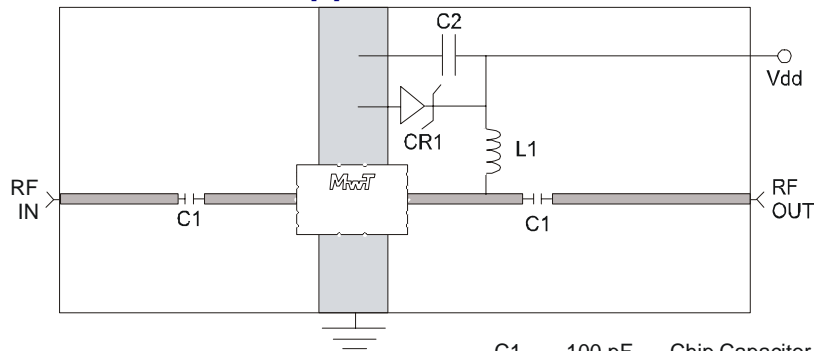
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Outline Diagram



Application Circuit



C1	100 pF	Chip Capacitor
C2	22 uF	Capacitor
L1	160 nH	Printed or Wound Coil
CR1	7.0 V	Zener Diode

— 50 ohm Microstrip Line

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