

Features:



- 1.0 dB NF
- 13.5 dB Gain
- +21 dBm P1dB
- Single Positive Bias
- Leadless Surface Mount Package (02)

The MPS-081017N-02 is a low noise, high dynamic range amplifier suitable for base station receiver and transmitter driver applications. The high output IP3 makes it ideal as a driver stage for low distortion applications. It is ideally suited for complex modulation schemes such as 2G, 2.5G, 3G, GSM, TDMA, EDGE, UMTS, WCDMA, CDMA2000, and TD-SCDMA applications.

Electrical Specifications @ 25°C, Vdd = 6.0 to 7.0 V*, Zo = 50 ohms

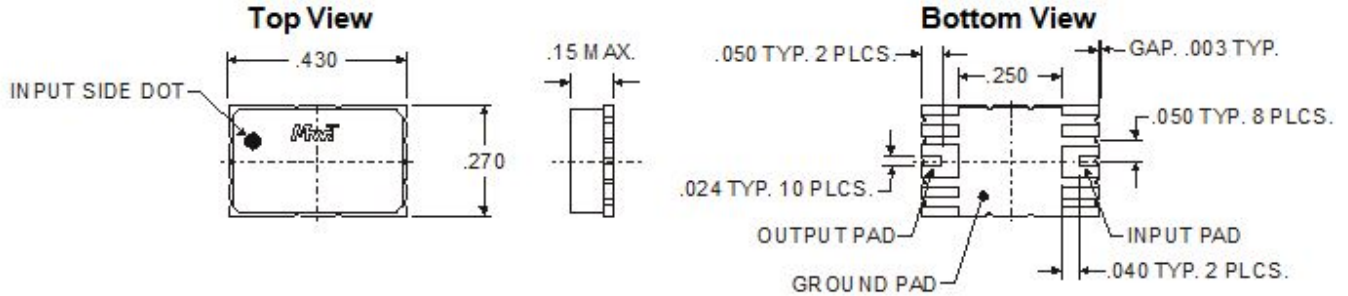
SYMBOL	PARAMETERS	Min	Typical	Max	Unit
Freq.	Frequency Range	800		960	MHz
SSG	Small Signal Gain	12.0	13.5		dB
P1 dB	Pout at 1 dB Comp Point		+21.0		dBm
IP3	Third-Order Intercept		36.0		dBm
NF	Noise Figure		1.0	1.3	dB
VSWR	VSWR (Input/Output)		2.0:1		
GOF	Gain Var. over 40 MHz		± 0.2	± 0.5	dB
GOT	Gain Var. over Temp		-0.015		dB/°C
Idd	DC Current		180	250	mA

*Vdd = 6.0 – 7.0 volts for best operation.

Absolute Maximum Ratings

Maximum Bias Voltage	7.5 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

Outline Diagram



All dimensions are in inches

Pin Designation (Top View)			
Pin 1 (DOT Top Left)	GND	Pin 10	GND
Pin 2	GND	Pin 9	GND
Pin 3	RF In/Vg	Pin 8	RF Out/Vdd
Pin 4	GND	Pin 7	GND
Pin 5	GND	Pin 6	GND

Application Circuit

