

### Features:



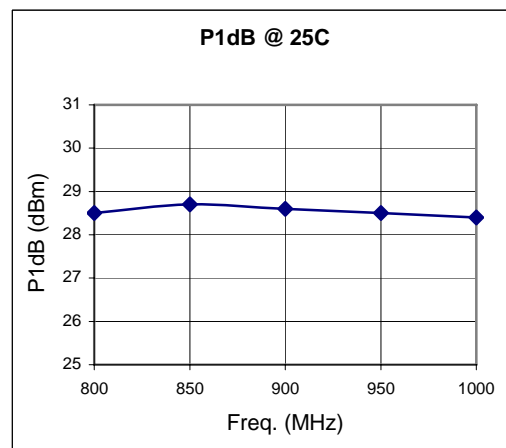
- +45 dBm IP3
- 15 dB Gain
- 2.0:1 VSWR

- +28.5 dBm P1dB
- Single Positive Bias
- Leadless Surface Mount Package (02)

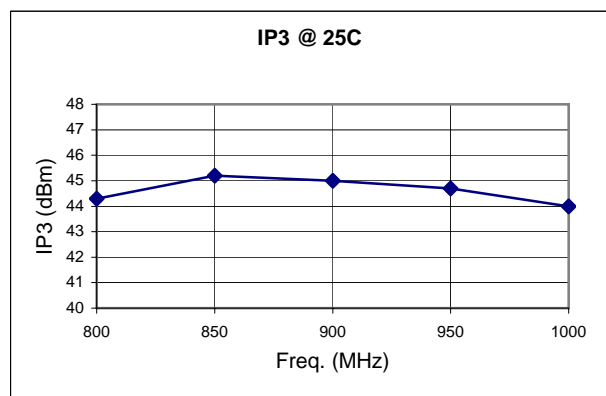
The MPS-081017-02 is a low cost high linearity modular amplifier designed to meet the ultra-linear transmitter driver requirements for commercial 2G, 2.5G, 3G, GSM, TDMA, EDGE, UMTS, WCDMA, CDMA2000, and TD-SCDMA applications. Key advantages are low intermodulation performance for multi-carrier and CDMA systems and low input/output return loss for ease of integration.

### Electrical Specifications @ 25°C, V<sub>dd</sub> = 7.5 V, Z<sub>o</sub> = 50 ohms

SYMBOL	PARAMETERS	Min	Typical	Max	Unit
Freq.	Frequency Range	800		1000	MHz
SSG	Small Signal Gain	14.0	15.0		dB
P1 dB	Pout at 1 dB Comp Point		+28.5		dBm
IP3 (1)	Third-Order Intercept	42	45		dBm
VSWR	VSWR (Input/Output)		2.0:1/2.5:1		
GOF	Gain Var. over Frequency		± 0.25	± 0.5	dB
GOT	Gain Var. over Temp		-0.015		dB/°C
I <sub>dd</sub>	DC Current		380	450	mA

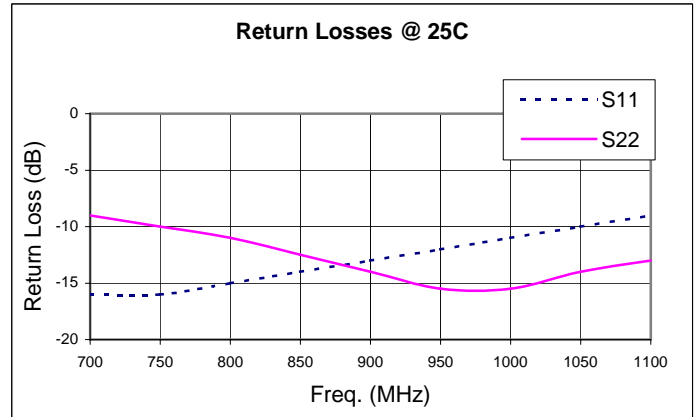
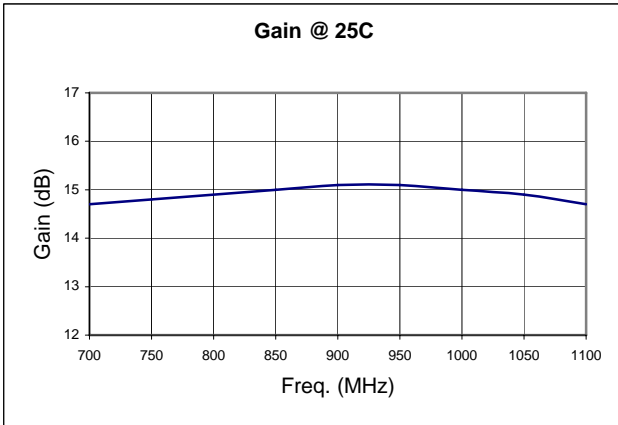


(1) Two tone test @ 13 dBm/tone, centered at 900 MHz with separation of 20 MHz.

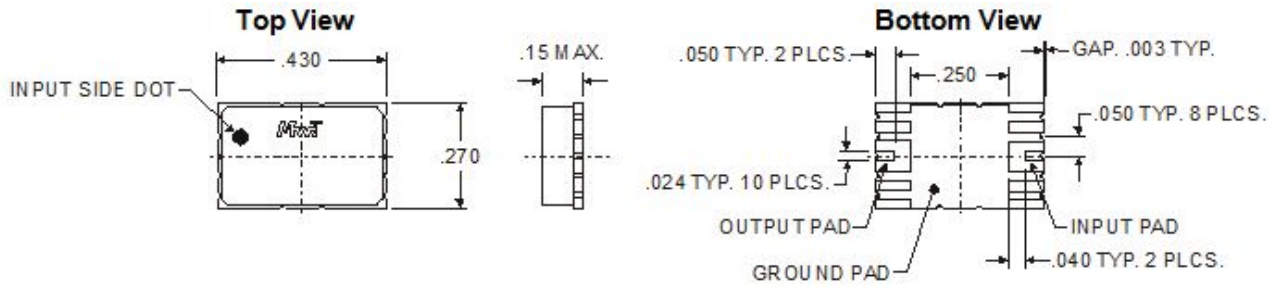


### Absolute Maximum Ratings

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 to + 150 °C



## Outline Diagram (Package 02)



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

