

### Features:

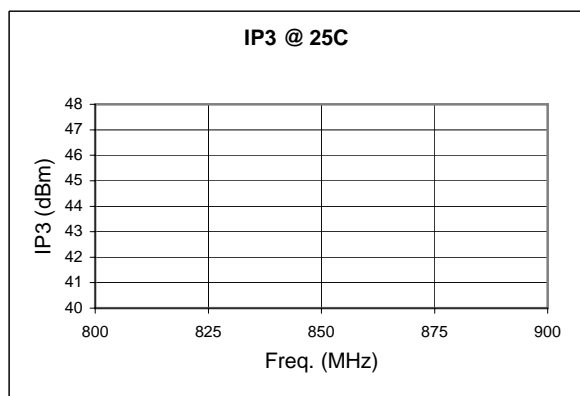
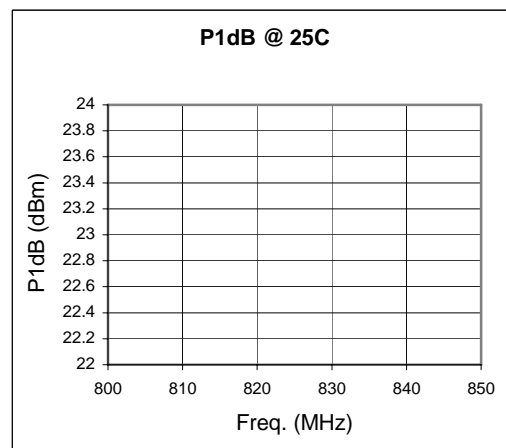


- 1.1 dB NF
- +44 dBm IP3
- 14.5 dB Gain
- +28 dBm P1dB
- Single Positive Bias
- Leadless Surface Mount Package

The MPS-080917P-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<sub>dd</sub> = 7.5 V, Z<sub>o</sub> = 50 ohms

| SYMBOL          | PARAMETERS               | Min  | Typical | Max   | Unit  |
|-----------------|--------------------------|------|---------|-------|-------|
| Freq.           | Frequency Range          | 864  |         | 899   | MHz   |
| SSG             | Small Signal Gain        | 13.0 | 14.5    |       | dB    |
| P1 dB           | Pout at 1 dB Comp Point  |      | +28.0   |       | dBm   |
| IP3             | Third-Order Intercept    |      | 44.0    |       | dBm   |
| NF              | Noise Figure             |      | 1.1     | 1.5   | 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 <sub>dd</sub> | DC Current               |      | 330     | 400   | mA    |



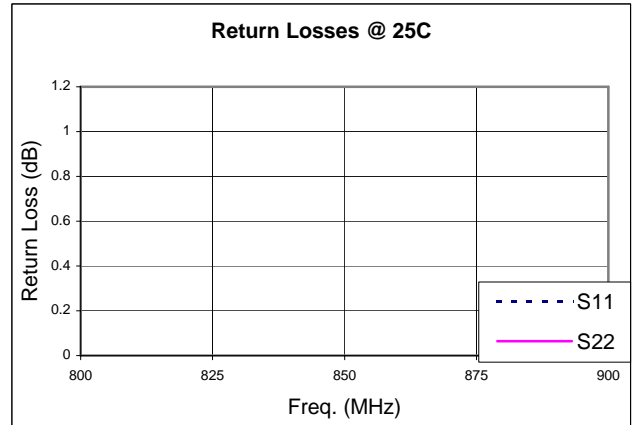
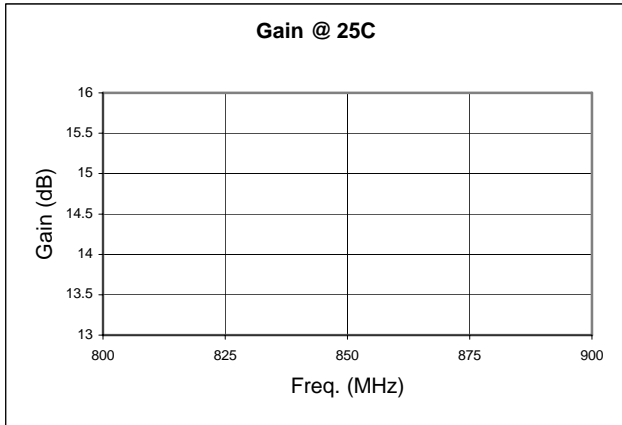
### Absolute Maximum Ratings

|                                    |                  |
|------------------------------------|------------------|
| 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 |

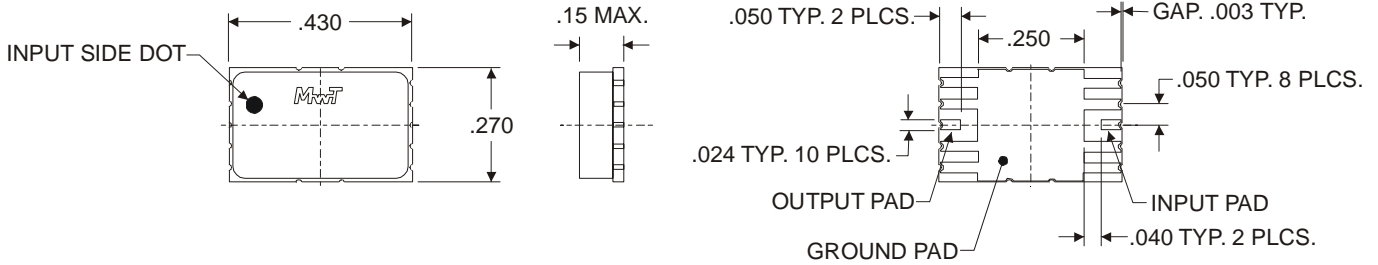
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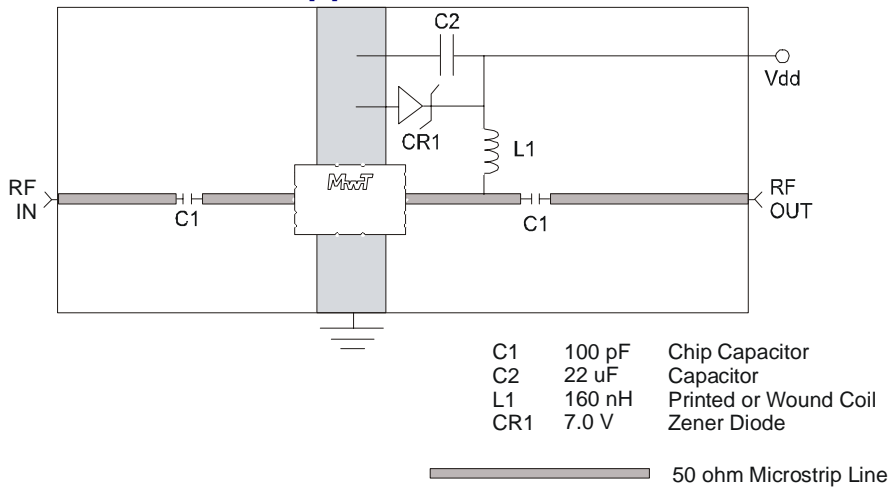
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## Outline Diagram



## Application Circuit



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