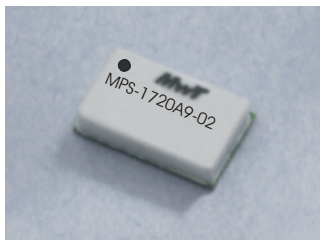


Features:

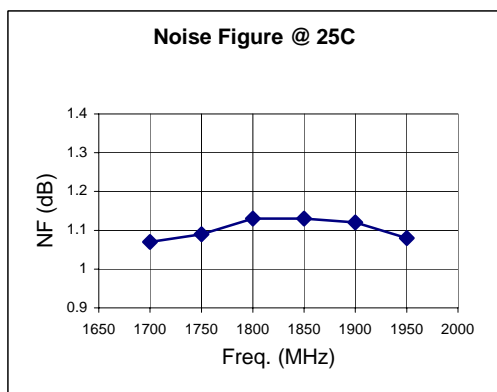


-  **1.1 dB NF**
-  **14 dB Gain**
-  **+20.0 dBm P1dB**
-  **Single Positive Bias**
-  **Leadless Surface Mount Package**

The MPS-1720A9-02 is a low-noise, high dynamic range amplifier designed for ultra linear GSM, TDMA, CDMA, NMT-900 and ETACS receiver applications. The circuit is matched to 50 ohm and employs a single stage GaAs FET with internal matching to provide an exceptional noise figure, 1.1 dB, combined with a high IP3, +34 dBm. Typical applications are cellular base station receivers, tower mounted LNA's, picocell repeaters and receiver multi-couplers.

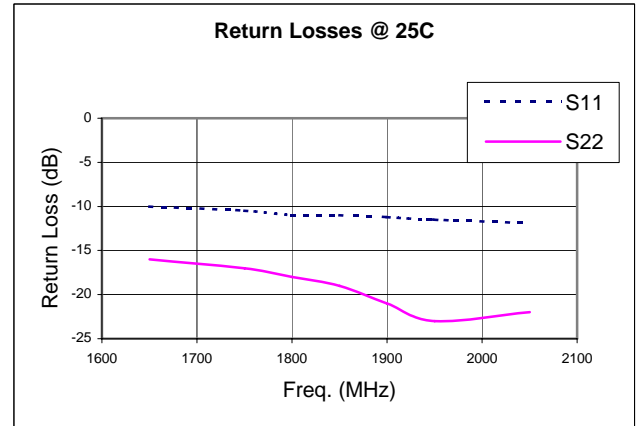
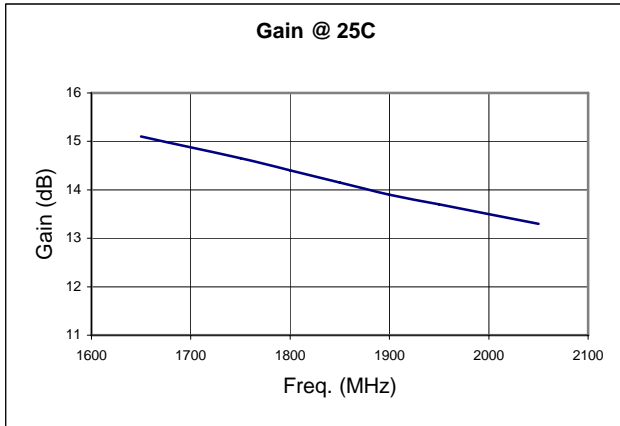
Electrical Specifications @ 25°C, V_{dd} = 6.0 V, Z_o = 50 ohms

SYMBOL	PARAMETERS	Min	Typical	Max	Unit
Freq	Frequency Range	800		960	MHz
SSG	Small Signal Gain	13	14		dB
P1 dB	Pout at 1 dB Comp Point		20.0		dBm
IP3	Third-Order Intercept		33.0		dBm
NF	Noise Figure		1.1	1.5	dB
VSWR	VSWR (Input/Output)		2.1:1/1.5:1	2.2:1/2.1:0	
GOF	Gain Var. over 40 MHz		± 0.4	± 0.6	dB
GOT	Gain Var. over Temp		-0.015		dB/°C
I _{dd}	DC Current		100	140	mA

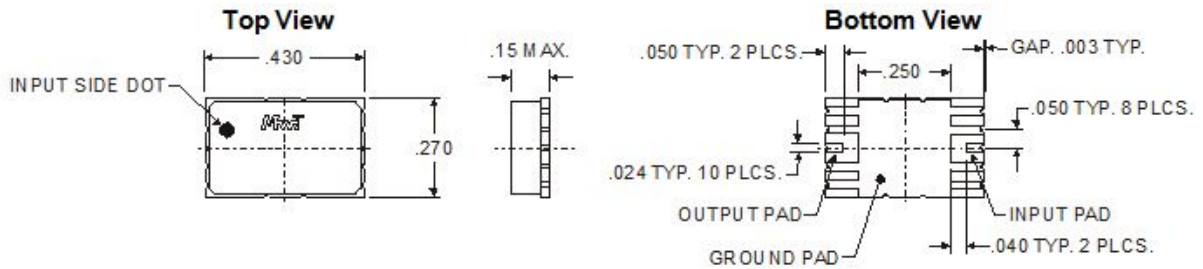


Absolute Maximum Ratings

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



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

