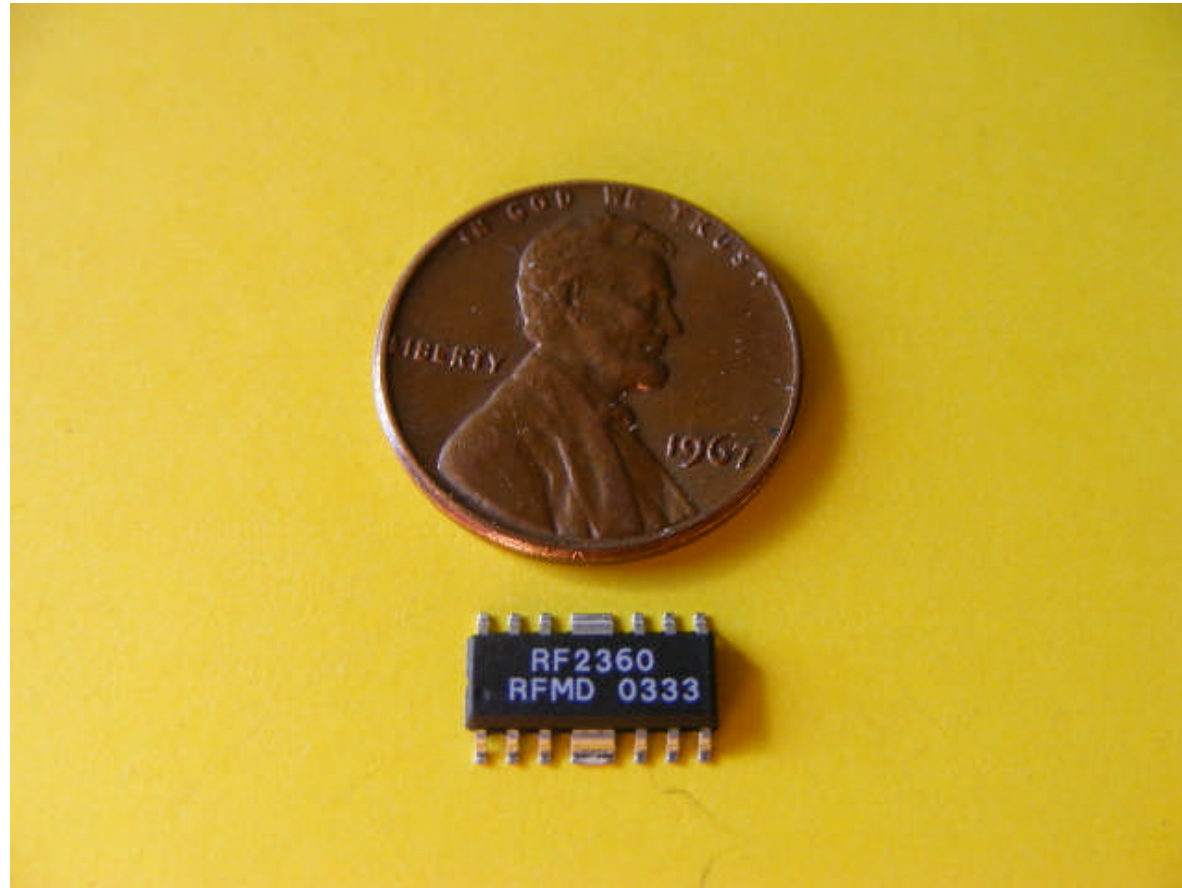


# RFMD2360 Amplifier

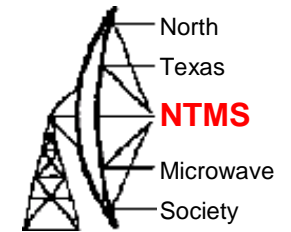
Keith Berglund WB5ZDP

February 7, 2009

# Small, but still hand solderable



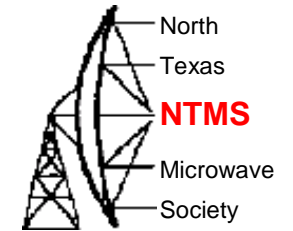
# Features



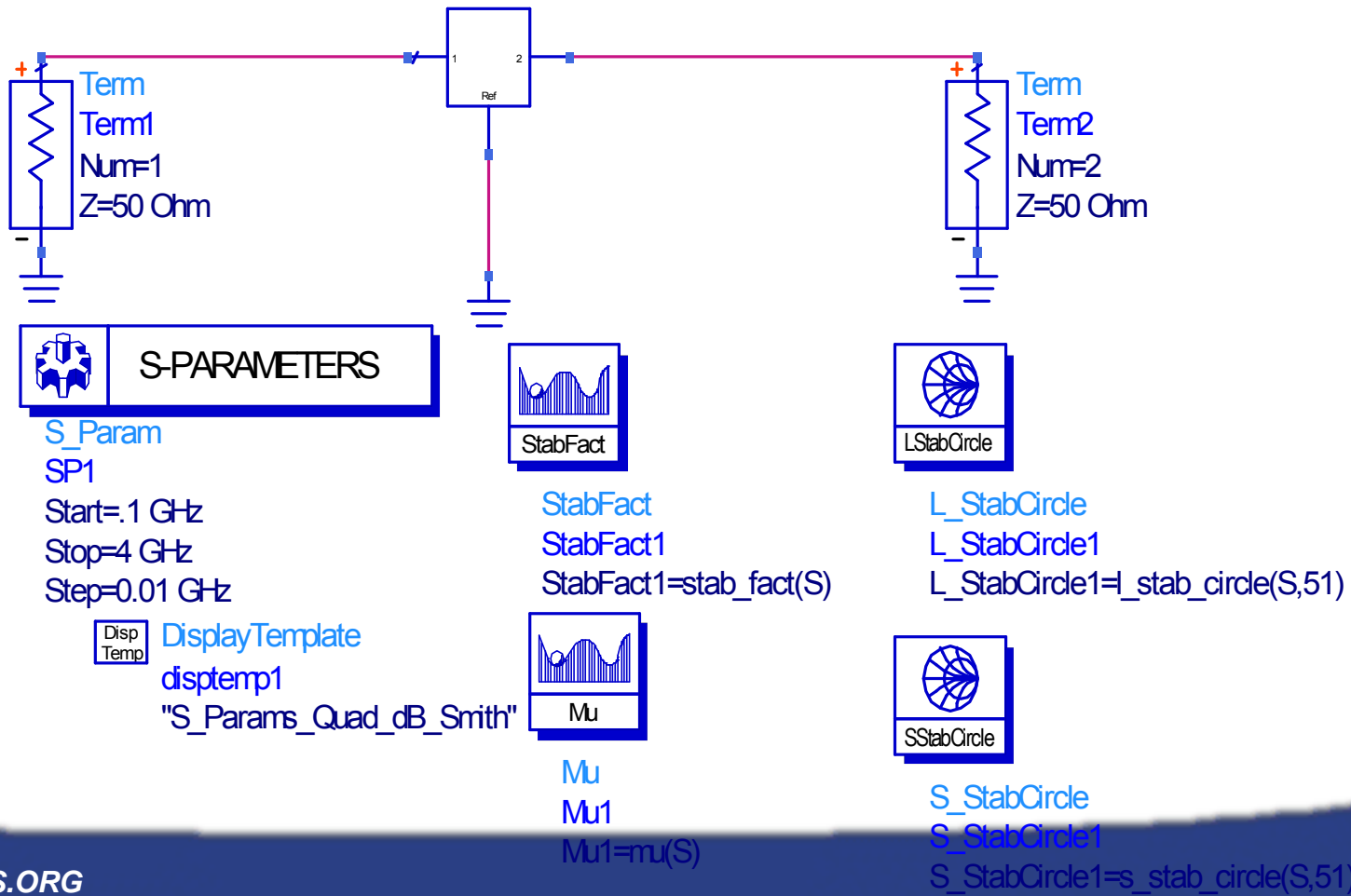
## Features

- 5 MHz to 1500 MHz Operation
- Internally Matched Input and Output
- 20 dB Small Signal Gain
- 1.2 dB Noise Figure
- +24 dBm Output Power
- Single 6V to 9V Positive Power Supply

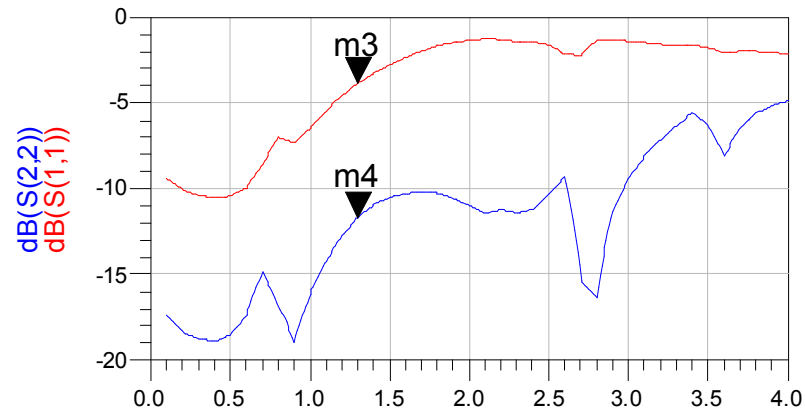
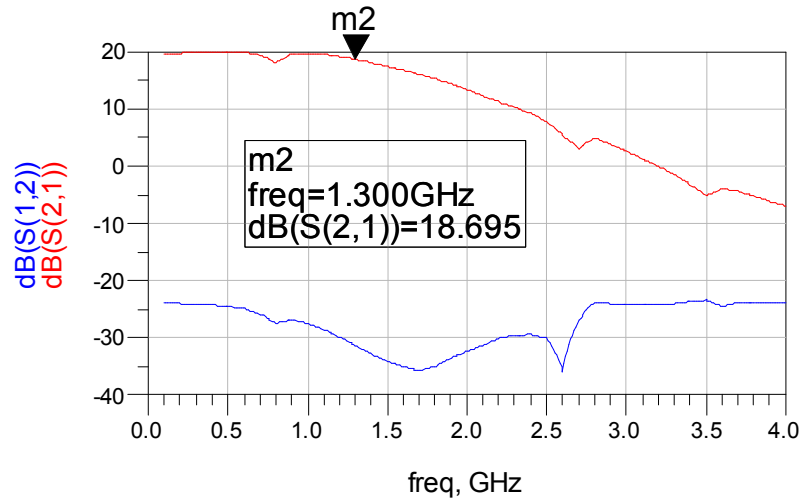
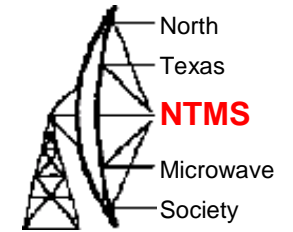
# RFMD2360 ADS Simulation



S2P  
 SNP1  
 File="C:\S\_DATA\RFMD\RFMD2360\_Demo.S2P"

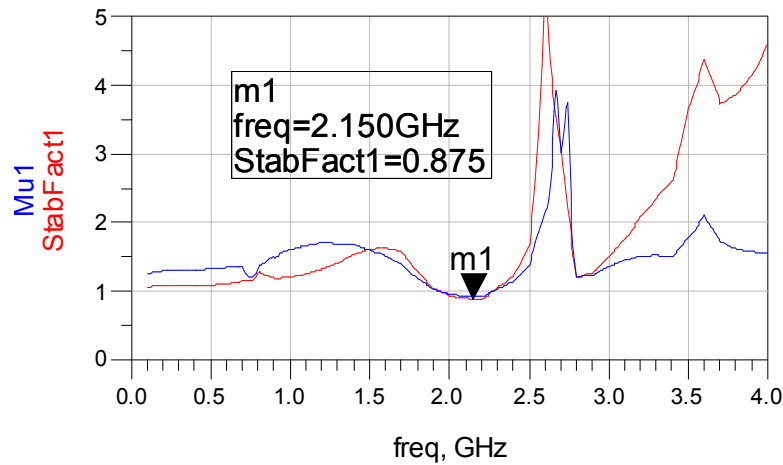


# RFMD2360 Amplifier

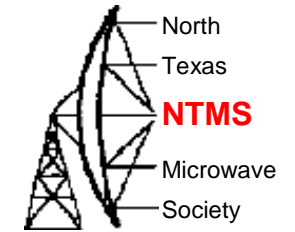


m3  
freq=1.300GHz  
dB(S(1,1))=-3.872

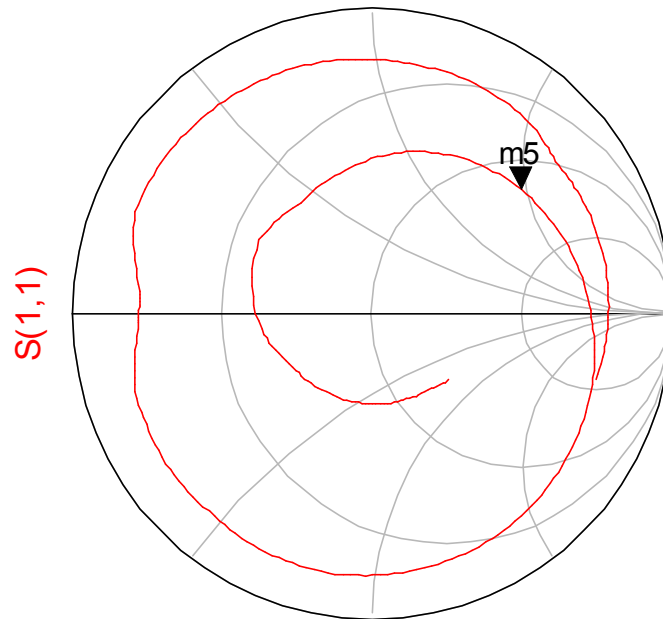
m4  
freq=1.300GHz  
dB(S(2,2))=-11.681



# RFMD2360 Amplifier



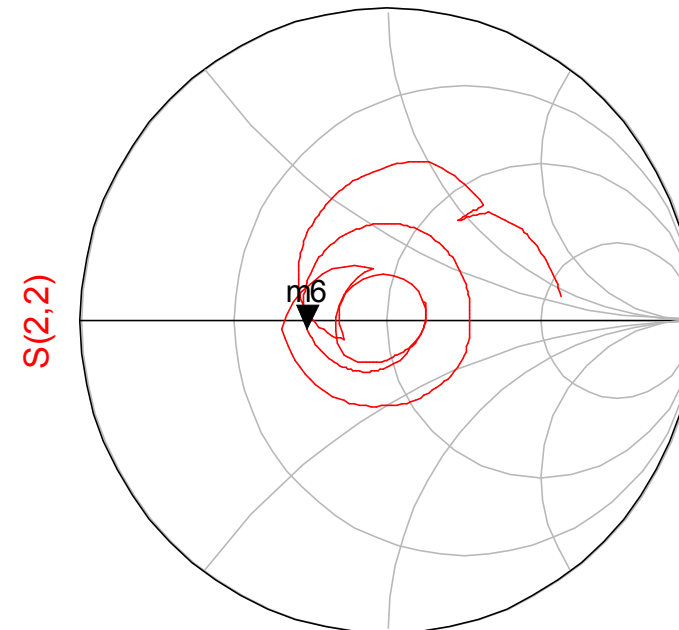
Input Reflection Coefficient



freq (100.0MHz to 4.000GHz)

m5  
freq=1.300GHz  
 $S(1,1)=0.640 / 39.056$   
impedance =  $Z_0 * (1.420 + j1.942)$

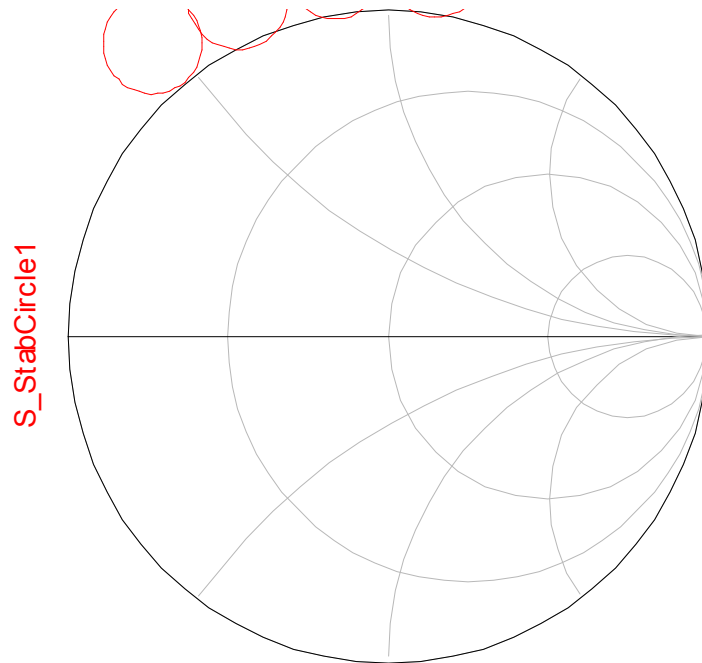
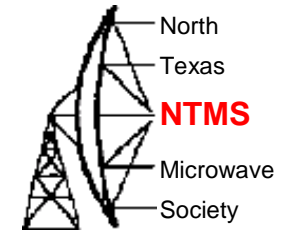
Output Reflection Coefficient



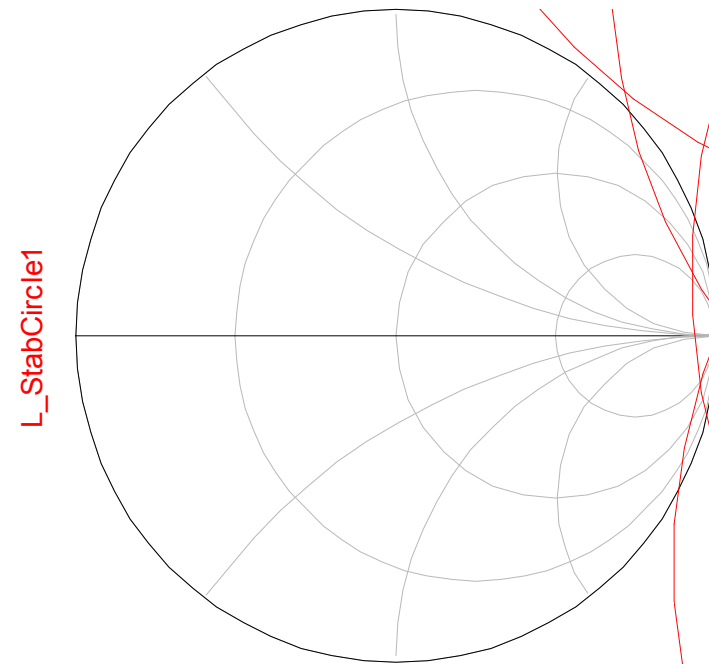
freq (100.0MHz to 4.000GHz)

m6  
freq=1.300GHz  
 $S(2,2)=0.261 / -173.810$   
impedance =  $Z_0 * (0.588 - j0.035)$

# RFMD2360 Source and Load Circles from 2 to 2.3 GHz



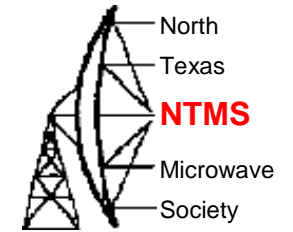
indep(S\_StabCircle1) (0.000 to 51.000)



indep(L\_StabCircle1) (0.000 to 51.000)

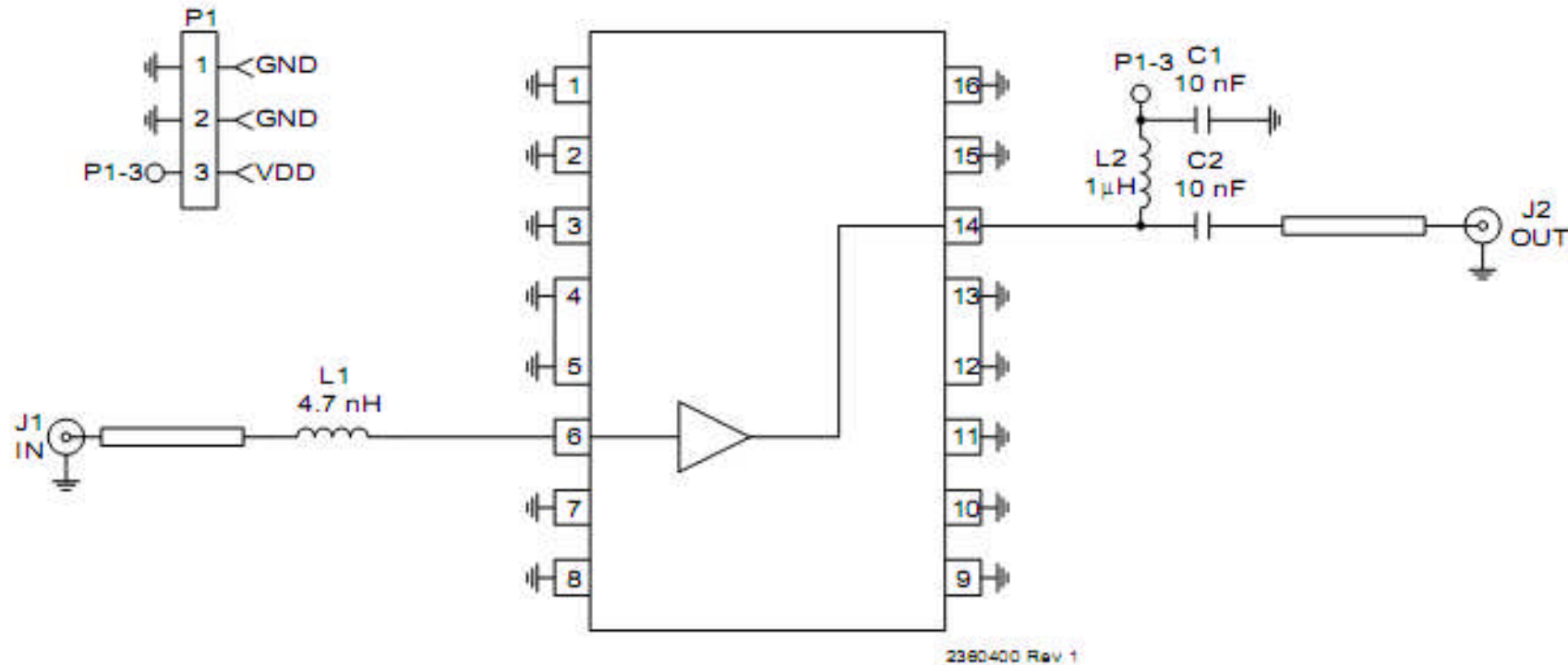
Avoid open circuits on output port!

# Simple Schematic



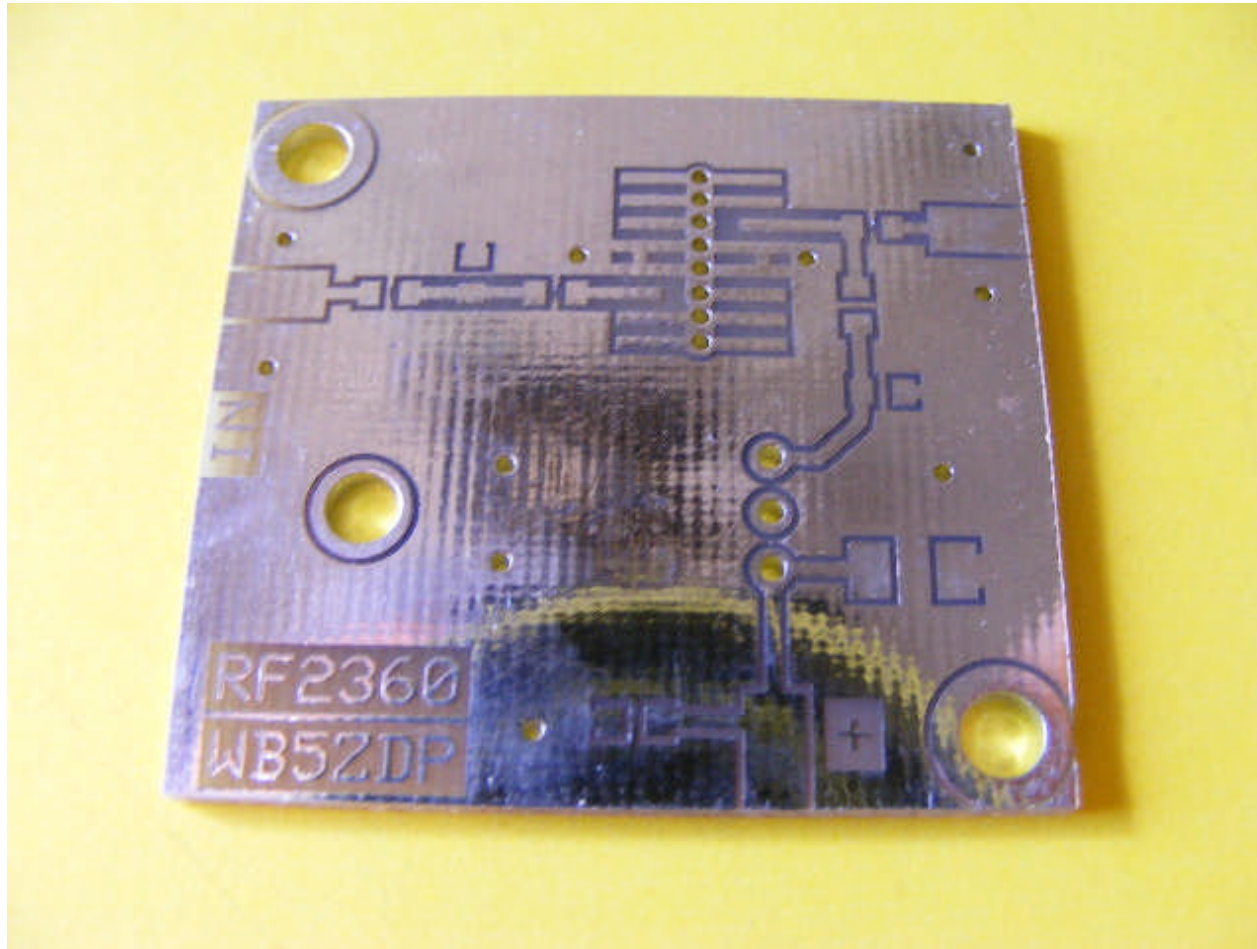
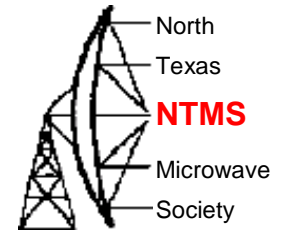
## Evaluation Board Schematic - 50 $\Omega$

(Download [Bill of Materials](http://www.rfmd.com) from [www.rfmd.com](http://www.rfmd.com).)

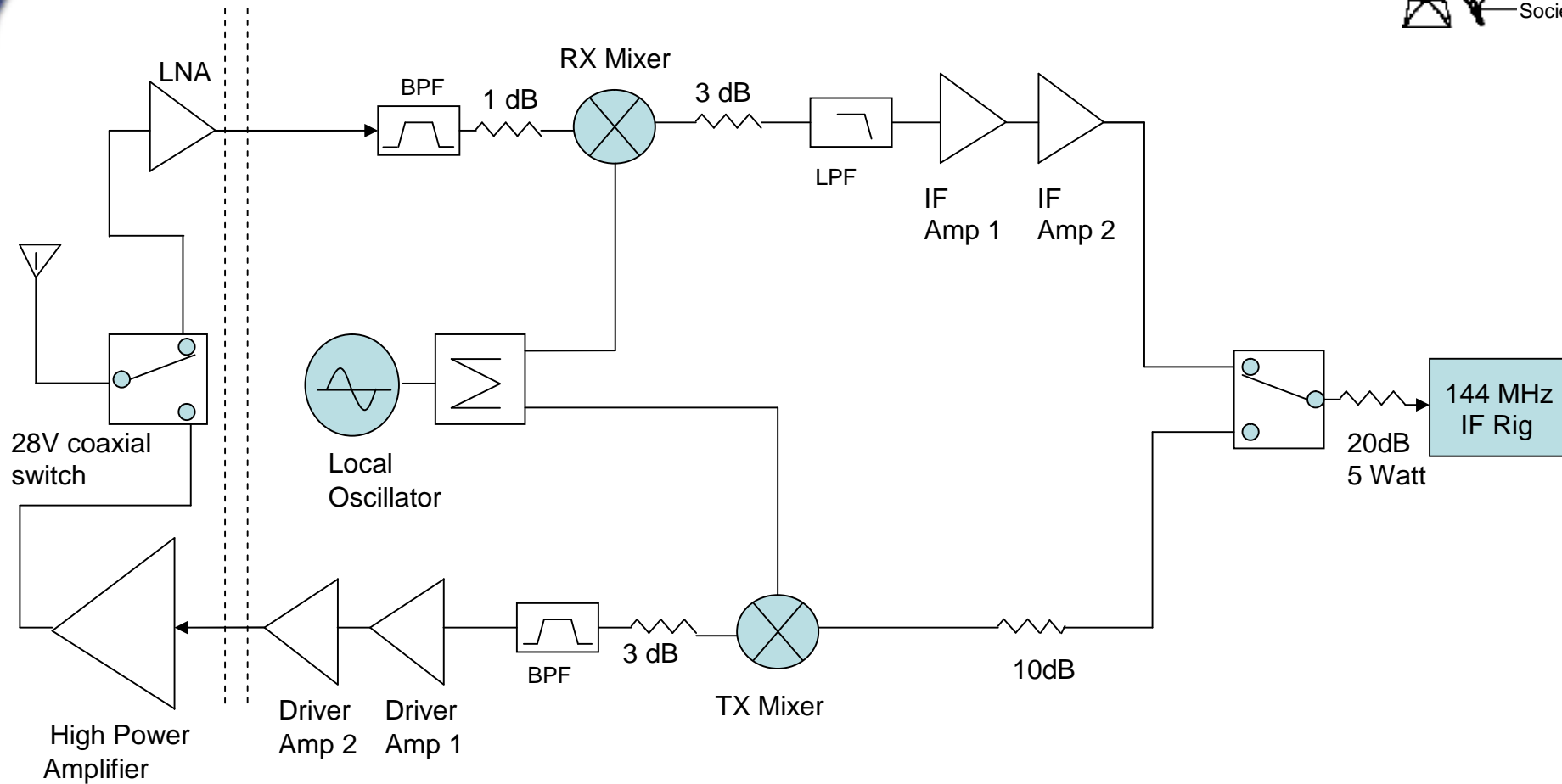
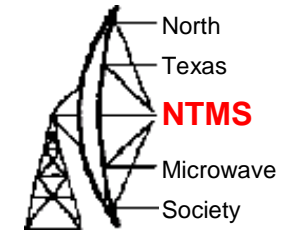




# Small PC Board



# Typical Basic Transverter



# RF2360 Driver in my 1296 MHz Tower Box

