

Features

- 110dB typical Isolation (HPA to Ant @Rx)
- 90dB typical Isolation (Ant to Rx Out @Tx)
- 1.0dB typical Insertion Loss (HPA to Ant @ Tx)
- Fast Switching Time (0.5 μ sec)
- 1.7 dB typical Noise Figure and 22 dB Rx. Gain
- 35dBm Output IP3
- Overpower protection (shutdown level : -10dBm)
- 40dBm dynamic range detector
- 7V, -12V DC supply (I_{dc} = 1A Max.)
- TTL compatible control



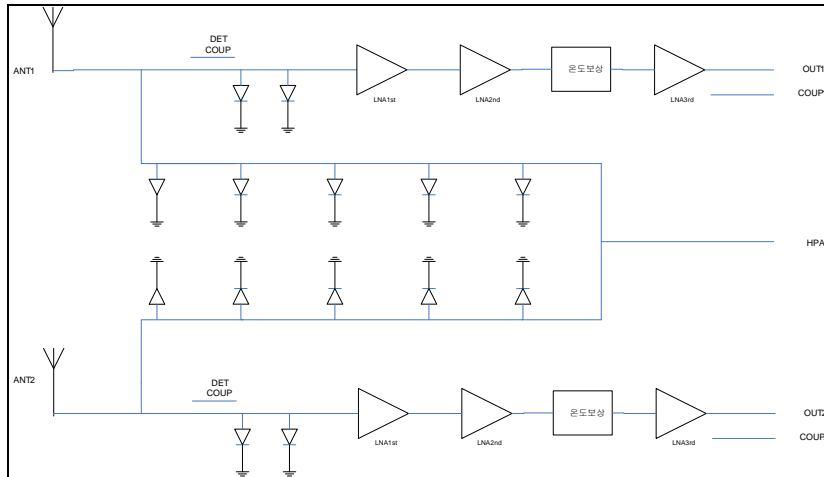
Description

ADMOTECH's RF Switch-LNA designed for WiBro and WiMax TDD systems feature high performance isolation characteristics and very fast switching time at high power signals. It also offer good insertion loss and Noise Figure in the market.

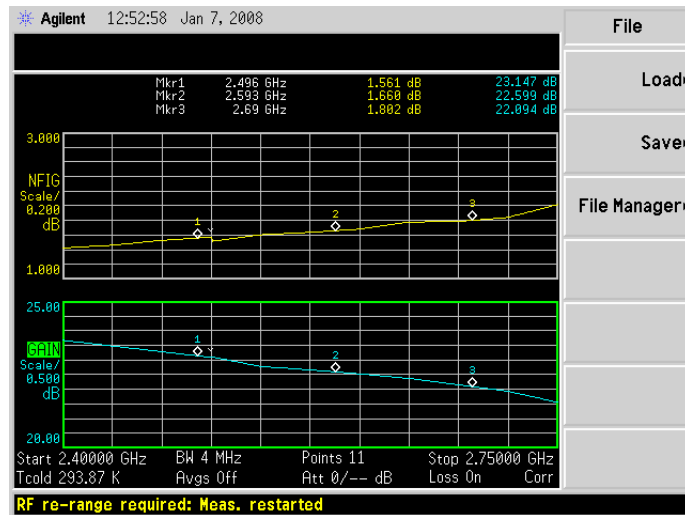
Electrical Specifications

Parameters	Specifications	Remarks
Frequency range	2500 MHz ~ 2700 MHz	Bandwith = 200 MHz
Insertion Loss (Max.)	HPA. To Ant : 1.3 dB Max (@Tx)	
Isolation (Min.)	90 dBc : HPA to Rx OUT (@Tx) 110 dBc : HPA to Ant (@Rx)	
Switching Time (Max.)	1.0 μ sec	Typ. 0.5 μ sec
Port Return Loss	18 dB (Min.)	
Noise Figure	2.0 dB Max. (@Rx)	Typ. 1.7dB
Rx Gain	22 dB \pm 0.5 dB (@Rx)	Within 1.0dB Gain variation @ all temp. range.
Gain Flatness	1.0 dB Max. over whole 200MHz BW	
Bias Voltage	7V, -12V (I _{dc} = 1A Max.)	
Overpower protection	Shutdown level : -10 dBm \pm 2 dBm(@Rx)	
Detector Range	-10dBm ~ -55dBm	
ALARM	Individual Switch and LNA Alarm when malfunctions	
Handling Power	40 dBm (10W)	
Operating Temp. Range	-40 °C ~ +70 °C	
Dimension	125.0 \times 125.0 \times 26.0 mm	

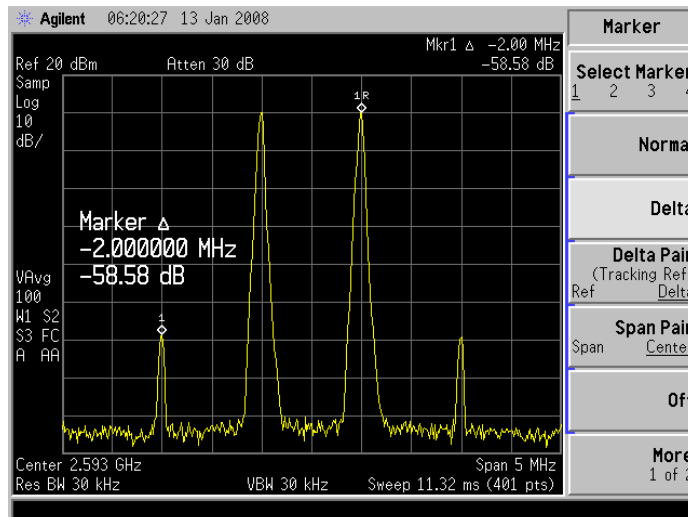
Block Diagram



Typical Response



Noise Figure and RX Gain.



Output IM3