

### Features

- 80dB typical Isolation (HPA to Rx @Tx Mode)
- 0.3dB typical Insertion Loss (HPA to Ant @ Tx Mode)
- Fast Switching Time (0.5  $\mu$ sec)
- 7V DC supply ( Idc = 500mA Max.)
- TTL compatible control
- 1.6 dB Typical Noise Figure and 26 dB Rx. Gain
- 35dBm Output IP3
- Overpower protection ( shutdown level : -10dBm)
- 30dBm dynamic range detector
- Switch and LNA ALARM



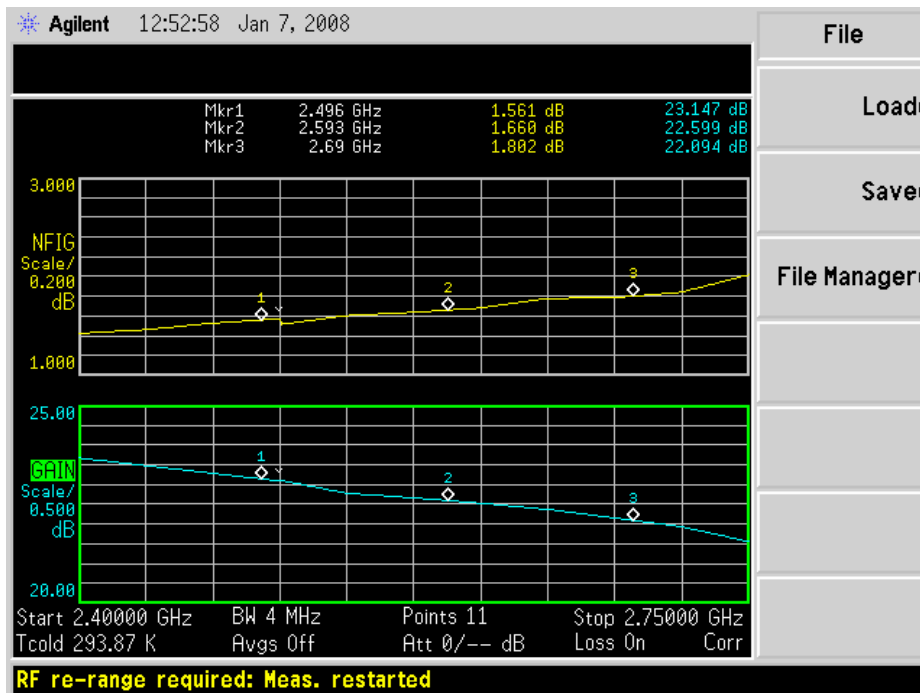
### Description

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.

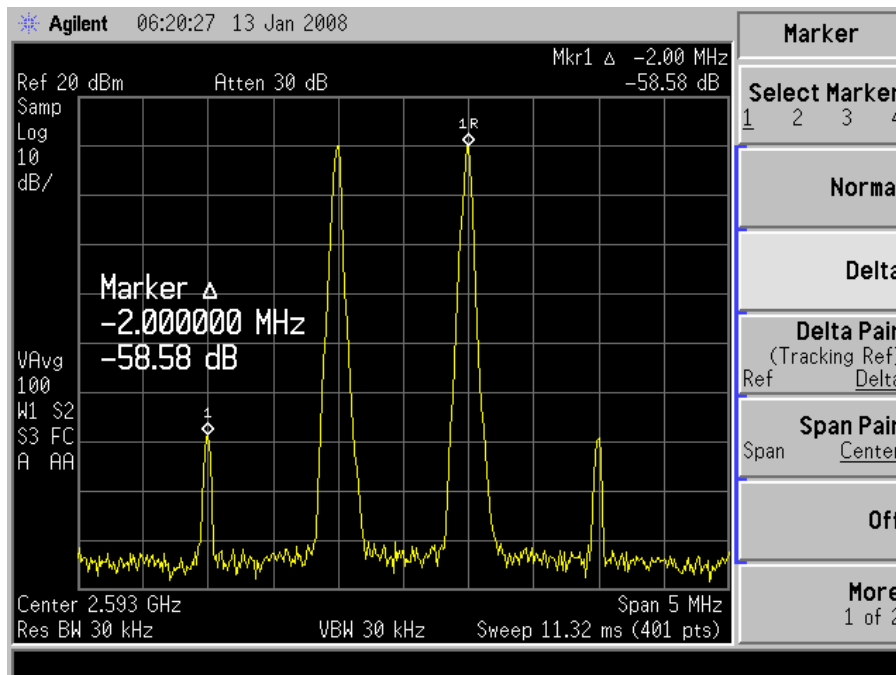
### Electrical Specifications

Parameters	Specifications	Remarks
Frequency range	2500 MHz ~ 2700 MHz	Bandwith = 200 MHz
Insertion Loss (Max.)	HPA. To Ant : 0.4 dB Max (@Tx)	
Isolation (Min.)	85 dBc : HPA to Rx OUT (@Tx)	
Switching Time (Max.)	1.0 $\mu$ sec	Typ. 0.5 $\mu$ sec
Port Return Loss	18 dB (Min.)	
Noise Figure	1.8 dB Max. (@Rx)	Typ. 1.7dB
Rx Gain	26 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, (Idc = 500mA Max.)	
Overpower protection	Shutdown level : -10 dBm $\pm$ 2 dBm(@Rx)	
Detector Range	-10dBm ~ -40dBm	
ALARM	Switch and LNA Alarm when malfunctions	
Handling Power	47 dBm (50W)	
Operating Temp. Range	-40 $^{\circ}$ C ~ +70 $^{\circ}$ C	
Dimension	85.0 $\times$ 60.0 $\times$ 27.6 mm	

# Typical Response



Noise Figure and RX Gain.



Output IM3

(10dB<sub>m</sub> two tone signals are applied at LNA input for measuring IM3.)

$$OIP3 = 10dB_m + IM3/2$$

