

## Wide Band RF Amplifier

- \* Operating Frequency : 20-6000 MHz.
- \* Saturated Power : +33 dBm, 35 typ
- \* Noise Figure : 3.0 dB. typ
- \* Gain : 16 dB.
- \* No external components required



**Description: Ultra wideband operation, Fiber Drivers, Test Instrumentation,  
All Purpose Driver**

### ELECTRICAL SPECIFICATION @ VDD= +28/-5VDC; Temp. = 25°C, 50Ω System

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	20		6000	MHz.
Gain	G	14	16	19	dB.
Gain Flatness	$\Delta G$		$\pm 1.8$	$\pm 2.5$	dB.
Power Added Efficiency	PAE		30		%
Power Output	Psat	33	35		dBm.
Output 3rd Order Intercept Point	OIP3	30	32		dBm.
2nd Harmonic @ +30dBm	HIP2	-15	-25		dBc.
Return Loss in/out	S11/S22	5	10		dB.
Operating Voltage	Vdc		-5,+28		Volt
Operating Current	Idq		100	400	mA.

### MECHANICAL SPECIFICATION

Parameter	Description	Limits	Units
Dimension	2.0 x 1.0 x 0.5		
RF Connectors IN/OUT	SMA-F Field Replaceable		
DC Connector	Filtered DC		

### PROTECTIONS

	Max	
RF Input Power	26	dBm.
Reverse Polarity Protection		
Load VSWR	5:01	RATIO
Stability	Unconditional	

### ENVIROMENTAL CHARACTERISTICS

Parameter	Symbol	Min.	Typ.	Max	Units
Operating Case Temperature	Tc	0		75	°C
Storage Temperature	Tstg	-55		150°C	°C

3009 Old State Rd, Telford, PA 18969

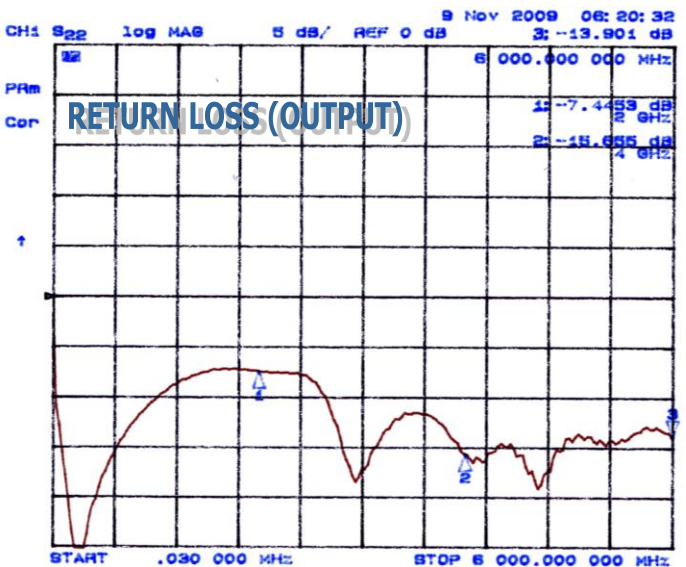
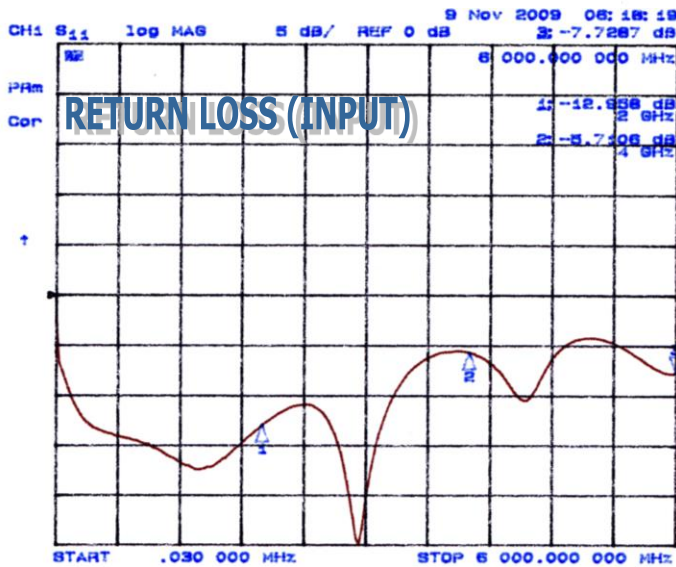
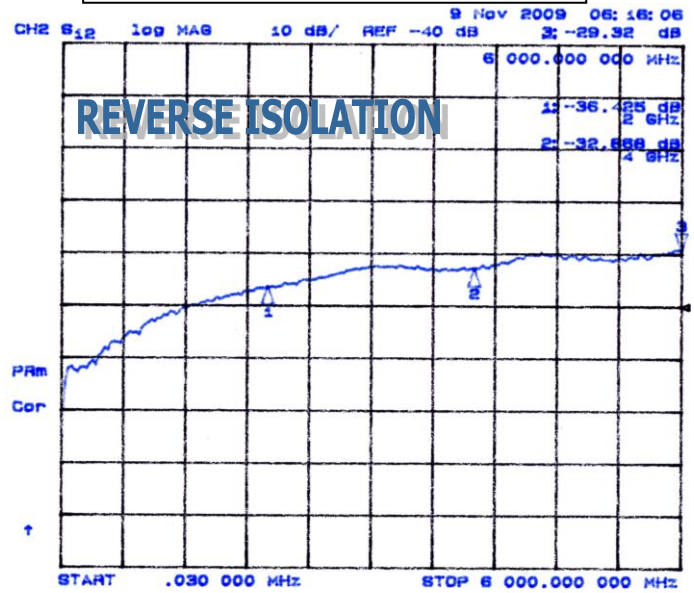
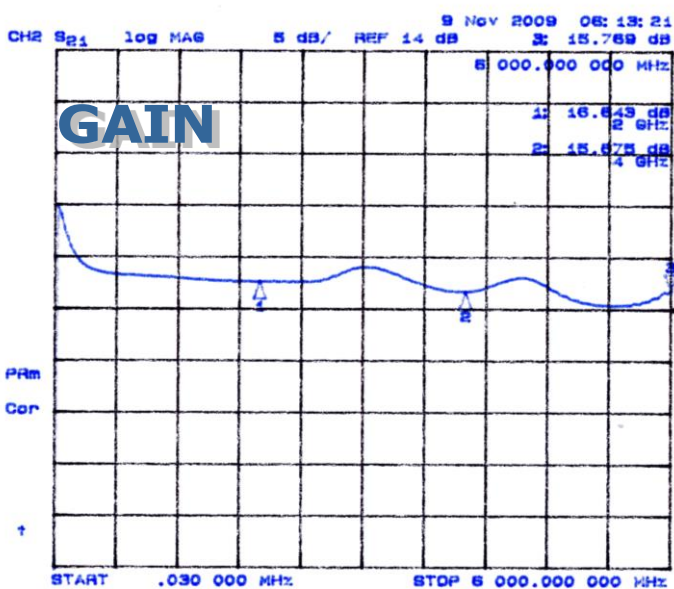
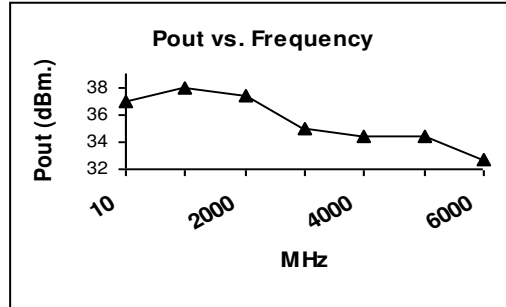
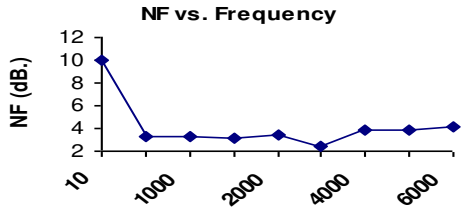
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<b>DESCRIPTION: ASC360</b>
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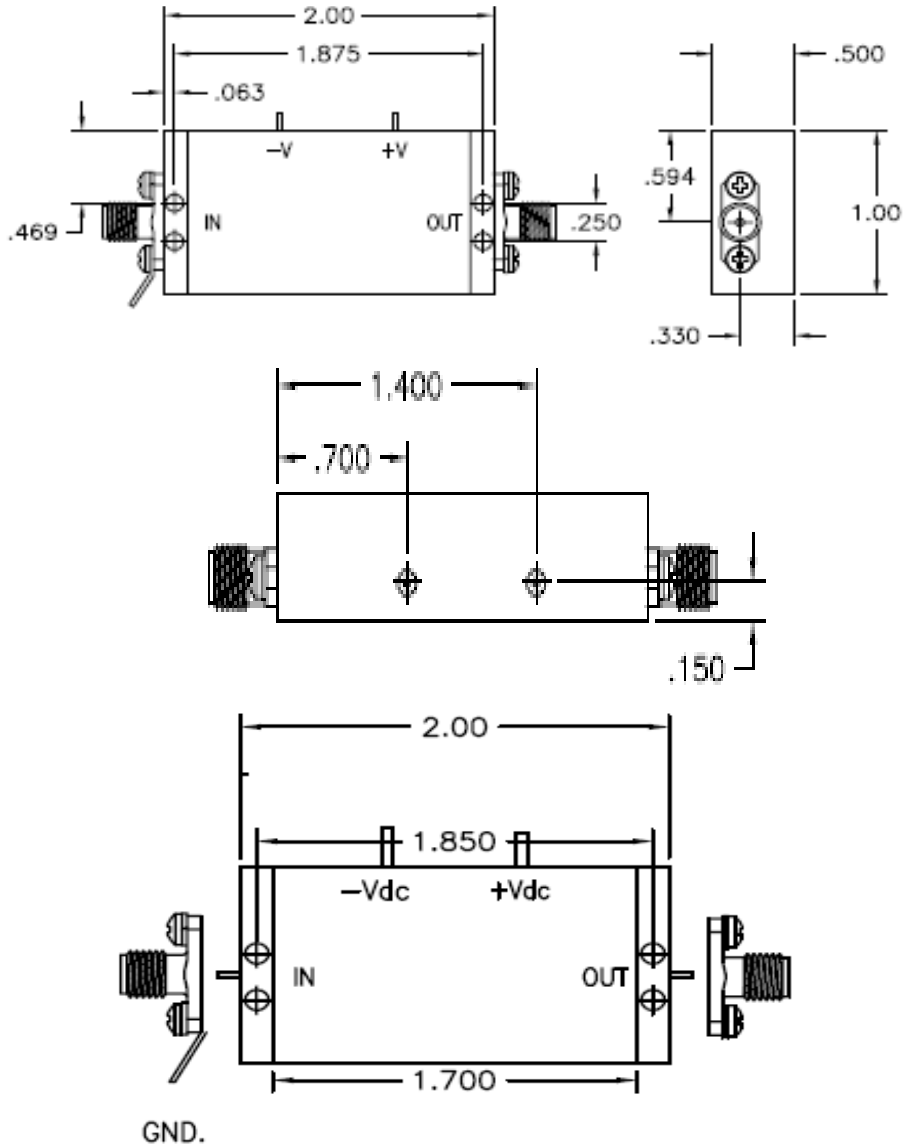
**FINAL ELECTRICAL TEST REPORT**  
**RECORD DATA @ +25°C ONLY**

<b>TEST</b> Vdc +28V/ -5V	<b>LIMITS</b> 0°C/+25°C/+70°C	<b>ACTUAL</b> <b>DATA</b>
Operating Frequency:	20-6000 MHZ	20-6000
Small Signal Gain	14.0 dB min 16.0 dB Typ	14.6 19.0
Gain Flatness	±2.5 dB max	±2.2
Output Power Psat	33.0 dBm min	34
Output IP3	30.0 dBm min	33
Return Loss In/Out	-5 dB max	-7.3 / -8.1
Operating Voltage	28V/ -5V max	28V / -5V
Operating Current	400 mA max	122
Maximum Input Power +26dBm in	Accept/Reject	AC



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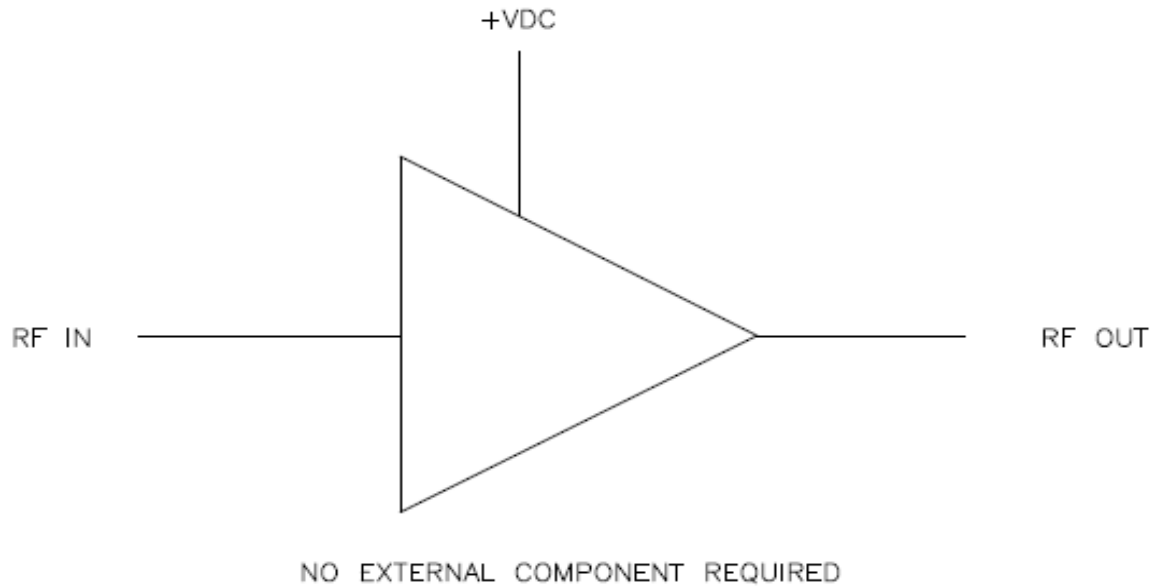
Outline Drawing



TURN ON/OFF AMPLIFIER

**ON** APPLIED -5V BEFORE +28V  
**OFF** SHUT OFF +28V BEFORE -5V

FUNCTIONAL BLOCK DIAGRAM



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