

## DESCRIPTION

AM000551SF-2H is a Broadband High Power Amplifier designed for high power RF applications. It operates from 30 MHz to 500 MHz and typically delivers 51 dBm CW output power and 28 dB small signal gain. The amplifier module has an Aluminum heat-sink attachment.

## FEATURES

- Broadband design from 30 to 500 MHz
- High Gain and High Power,  $P_{SAT} = 51\text{dBm}$ , Gain = 28dB
- +28VDC Single Bias.

## APPLICATIONS

- TV, FM Broadcasting
- Broadband Radio
- Test Bench Amplifier

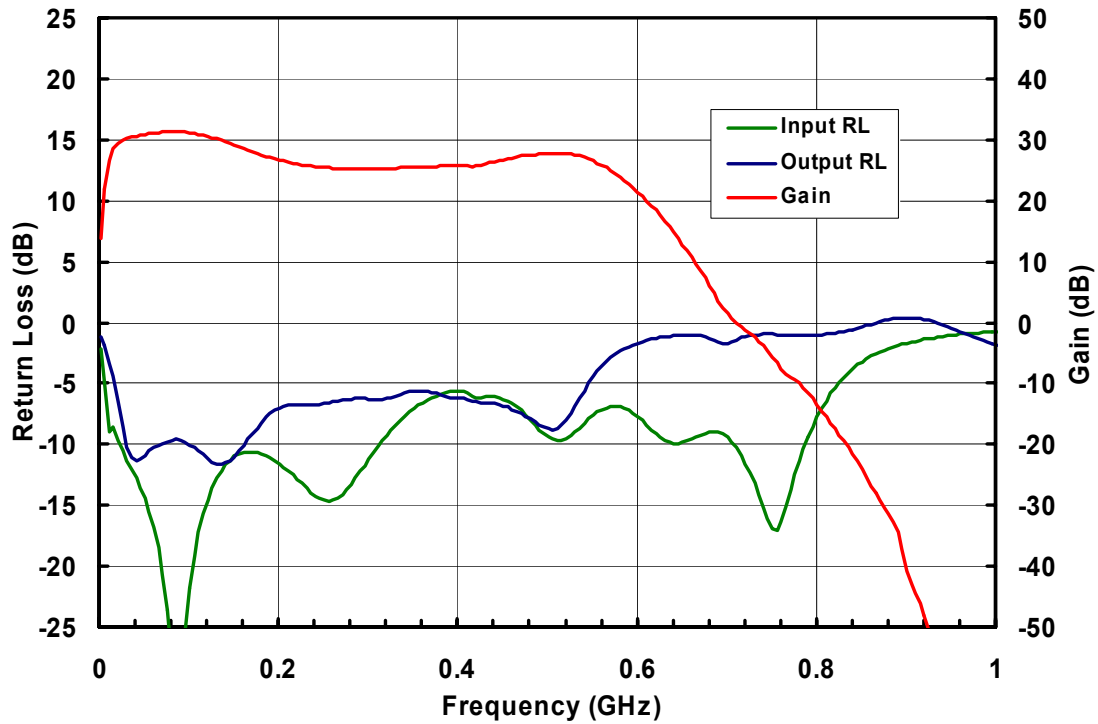
## PERFORMANCE\* ( $V_{ds} = +28\text{V}$ , $I_{dq} = 1.4\text{A}$ , $T_a = 25^\circ\text{C}$ )

Parameters	Minimum	Typical	Maximum
Frequency		30 – 500 MHz	
Gain (Small signal)	23 dB	28 dB	33 dB
Gain Ripple		$\pm 2.5$ dB	$\pm 4$ dB
$P_{sat}$	49 dBm	51 dBm	
Efficiency	35%	40%	
Input VSWR		3 : 1	4 : 1
Output VSWR		3 : 1	5 : 1
Thermal Resistance (Device Junction to Housing)		0.6 °C/W	

## ABSOLUTE MAXIMUM RATING

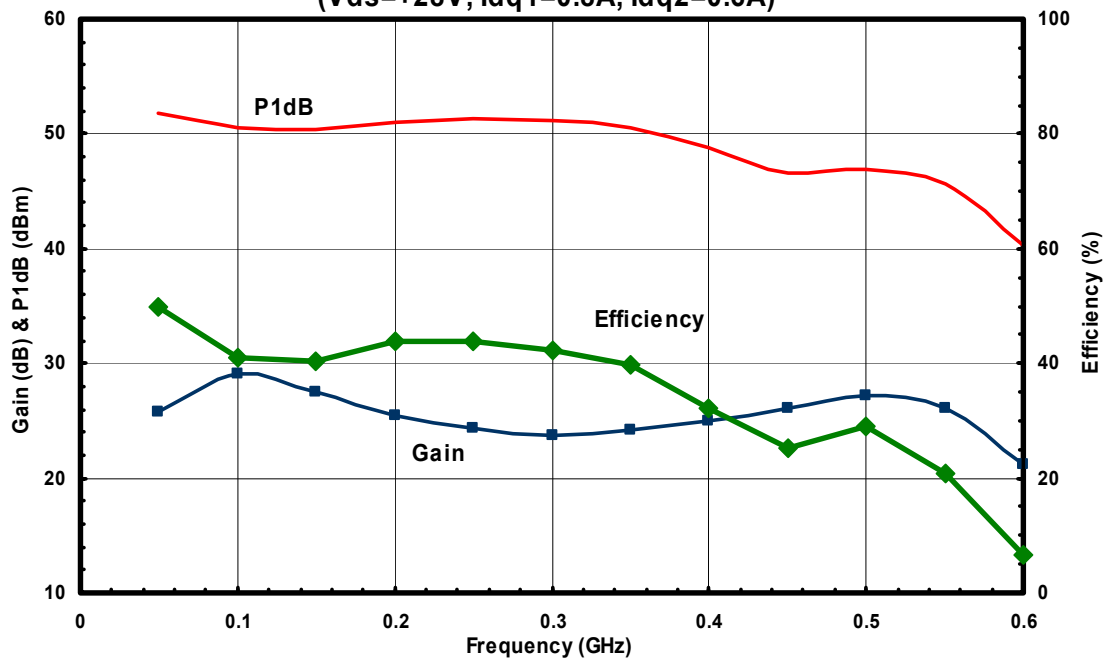
Parameter	Symbol	Rating
Drain to Source voltage	$V_{ds}$	50 V
Gate to Source voltage	$V_{gs}$	15 V
Drain source current	$I_{ds}$	23 A
Continuous dissipation at room temperature	$P_t$	440 W
Channel temperature	$T_{ch}$	200 °C
Storage temperature	$T_{sto}$	-60°C to +150°C

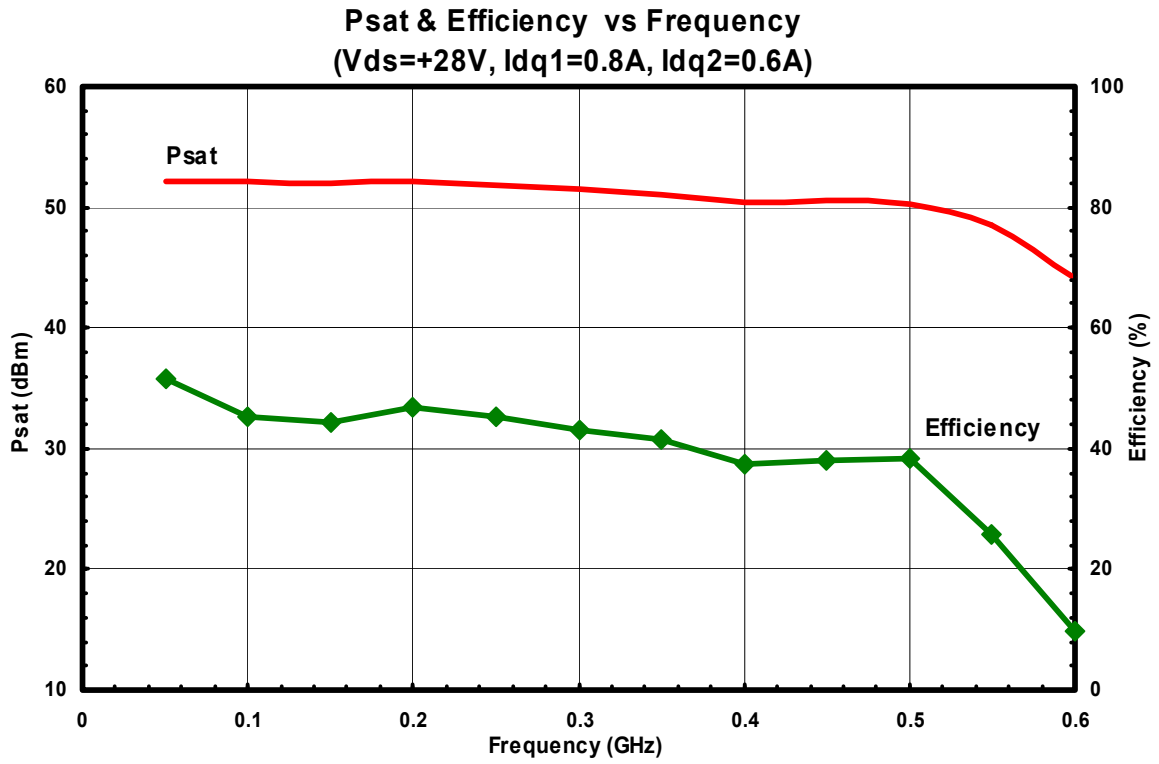
**SMALL SIGNAL DATA ( $V_{ds}= +28V$ ,  $I_{dq1}=0.8A$ ,  $I_{dq2}=0.6A$ ,  $T_a=25^{\circ}C$ )**



**POWER DATA ( $V_{ds}= +28V$ ,  $I_{dq}=1.4A$ ,  $T_a=25^{\circ}C$ )**

**Gain, P1dB & Efficiency vs Frequency**  
 ( $V_{ds}=+28V$ ,  $I_{dq1}=0.8A$ ,  $I_{dq2}=0.6A$ )





**PACKAGE OUTLINE**

