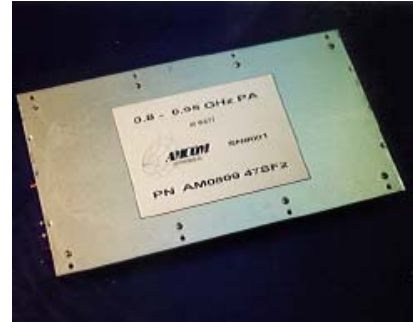




DESCRIPTION

AMCOM's AM091047SF-2H is a Cellular Broadband Power Amplifier designed for high power applications. The class AB amplifier operates from 935 to 960MHz and delivers a minimum P1dB of +46dBm and a minimum small signal gain of 21.5dB.



FEATURES

- Covers frequency range from 935 to 960MHz
- High Gain (21.5dB min.) and High Output Power (46dBm min.) across entire operating frequency band.
- Output Isolation provides protection from load reflections.
- +15V / -5V bias with built-in zero-gate voltage/drain shutoff circuit.
- High Linearity (IP3 typical: +57dBm)
- Input VSWR: 1.5:1 max. Output VSWR: 1.25:1 max.

ABSOLUTE MAXIMUM RATING

Parameters	Rating
Positive Bias Voltage	+12V
Negative Bias Voltage	-7V
Input RF Power	1 watt
Operating Temperature	-10 / +55

PERFORMANCE FROM 935-960MHz (+10V / -5V, TA = 25°C)

Parameters	Specifications		
	MIN	TYP	MAX
Frequency Range (MHz)	935		960
Power Gain (dB)	21.5	23	
P1dB (dBm)	46	46.5	
Gain variation with Frequency (dB)			2
IP3 (dBm)		57	
Input VSWR			1.5:1
Output VSWR			1.25:1
Harmonics (dBc)			-30
Spurious (dBc)			-70
Efficiency @ Pout = +47dBm (%)		30	
Positive Bias (VDC)		10	
Negative Bias (VDC)		-5	
Ids @ Pout = +47dBm (A)		13.5	

GENERAL PRECAUTIONS

The AM091047SF-2H Power Amplifier is housed in an Aluminum housing with an SMA female RF input and output connectors. The amplifier is designed to operate within specifications when biased with +10 / -5 VDC. Furthermore, the amplifier dissipates an average of 150 watts and, although the unit is provided with a heatsink, it needs to be fan cooled during operation to allow the case temperature to remain well below +55°C.

PACKAGE OUTLINE

