

## HPA Series

## 850 - 950MHz 10W RF Power Amplifier

### Features

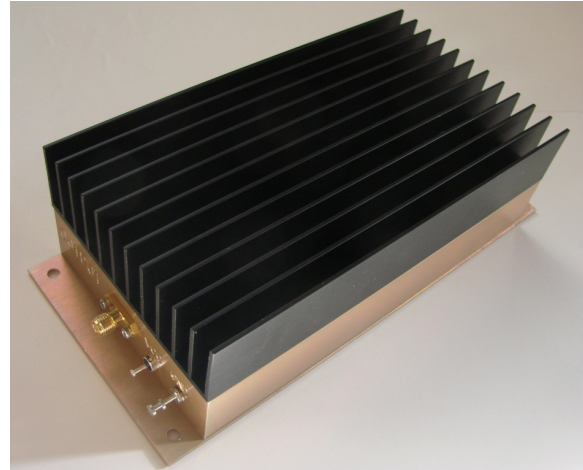
- Frequency Range: 850 - 950MHz
- Gain: 40dB
- P<sub>out</sub>: +40dBm
- P<sub>sat</sub>: +42dBm
- IP3: +48dBm
- DC Power: 12V
- SMA Connector

Performance measured @ 900MHz

### Description

HPA-900A is a 10Watt (+40dBm) output RF Power Amplifier operating from single 12V DC power supply with frequency range in 850 - 950MHz.

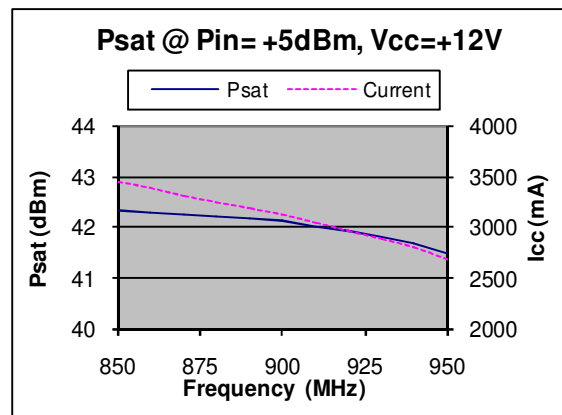
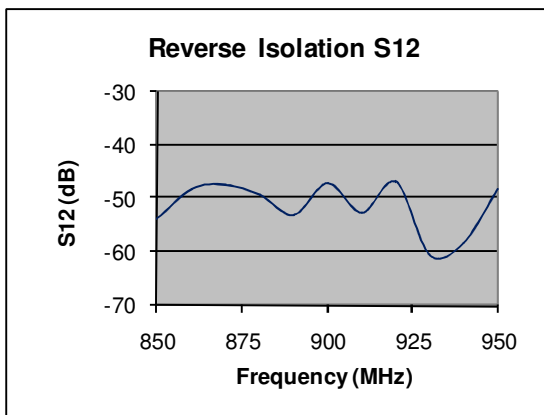
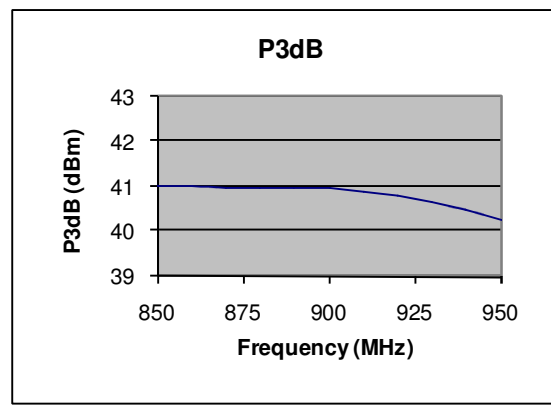
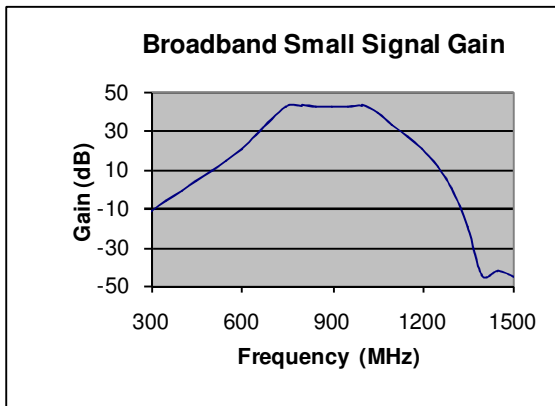
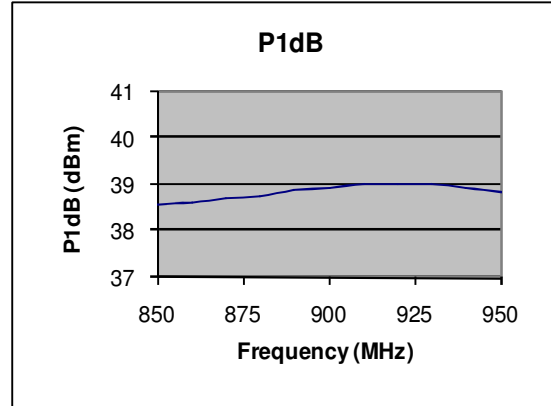
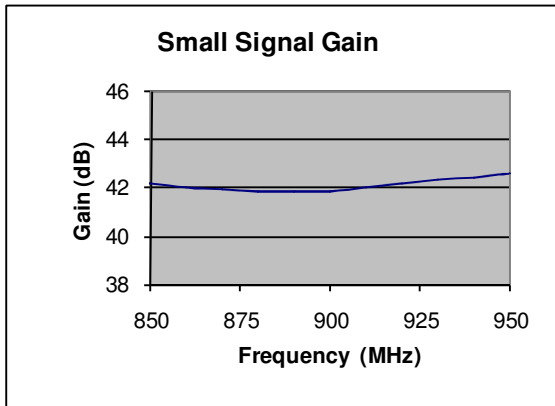
### Picture



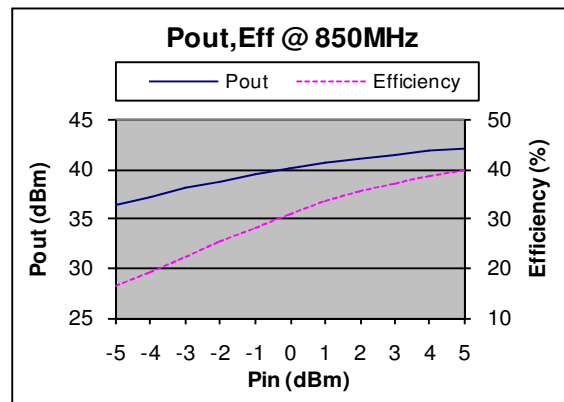
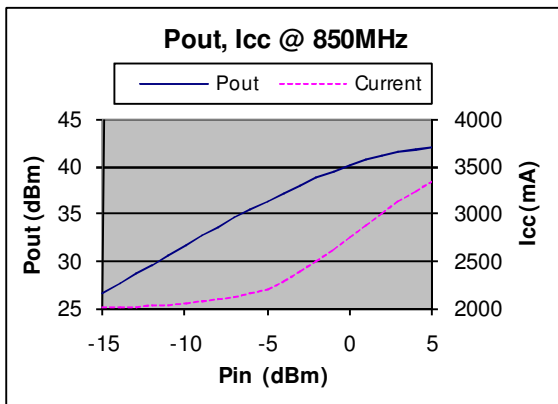
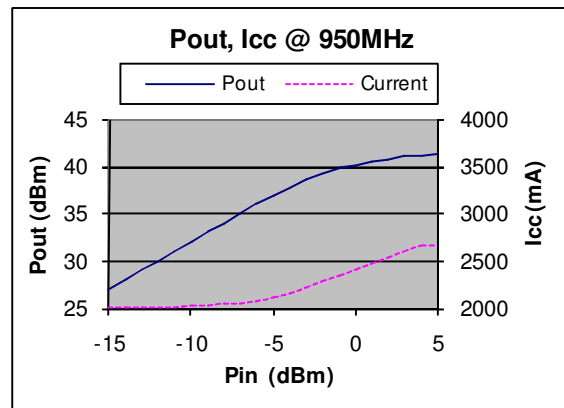
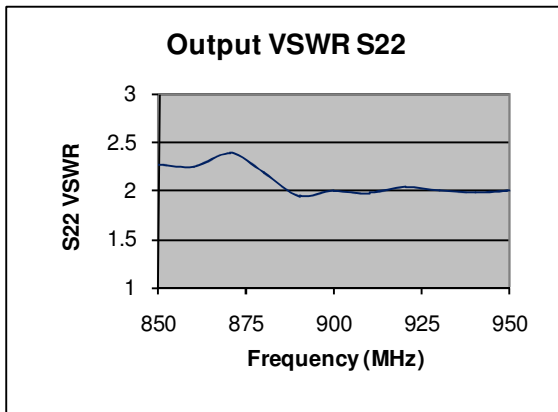
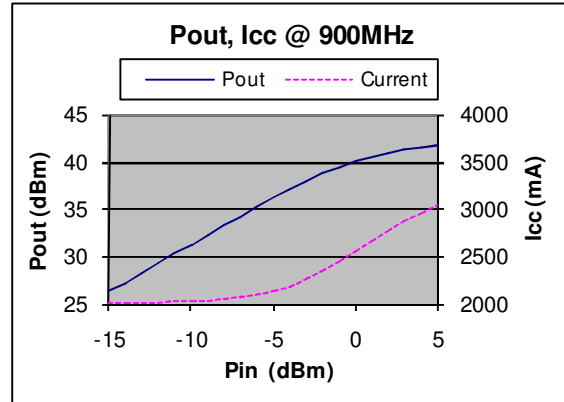
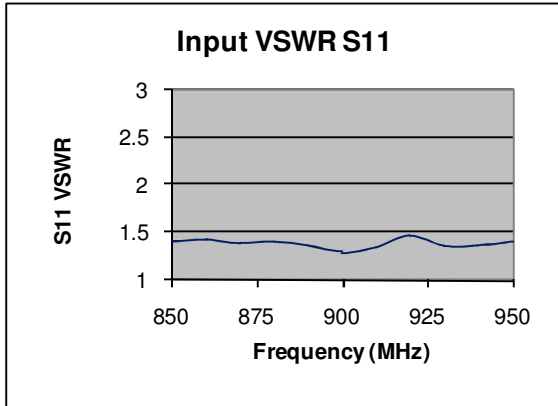
### Electrical Specifications @ +25 °C, Z<sub>S</sub> = Z<sub>L</sub> = 50 Ω, V<sub>cc</sub> = +12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	850		950
Small Signal Gain	dB	40	42	
Output Power P <sub>out</sub> @ P <sub>in</sub> = 0dBm	dBm		+40	
Saturated Power P <sub>sat</sub> @ P <sub>in</sub> = +5dBm	dBm		+42	
IP3	dBm		+48	
Reverse Isolation	dB		-53	
Noise Figure	dB		11	
Efficiency at P <sub>out</sub> = +40dBm	%		31	
VSWR Input			1.4:1	
DC Power Supply	V		+12	
Supply Current Quiescent (no RF)	mA		2000	
@ P <sub>out</sub> = +40dBm	mA		2750	
Size (Excluding SMA Connector)	inch	7.000" x 3.250" x 2.000"		
Weight	Oz.	24 (680g)		

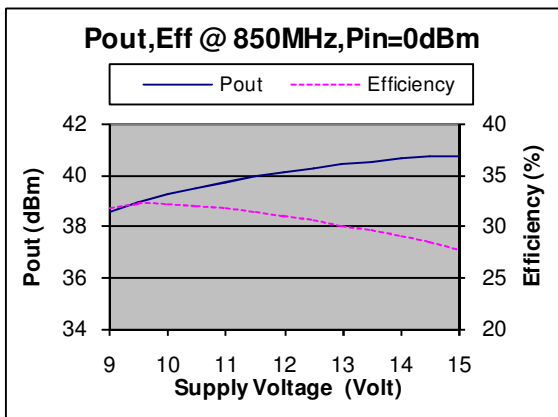
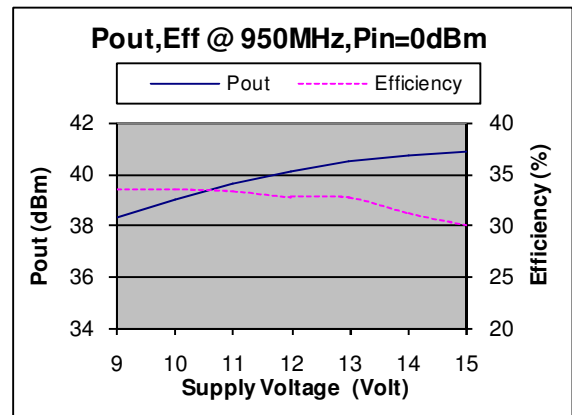
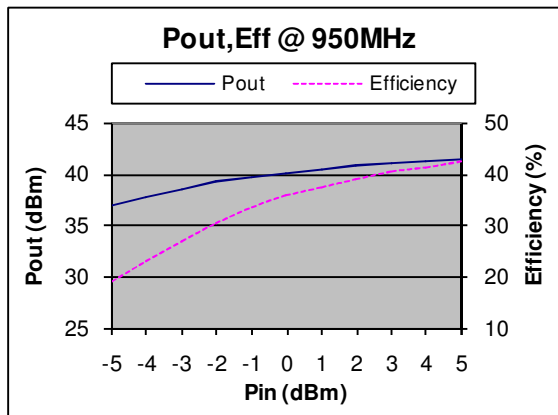
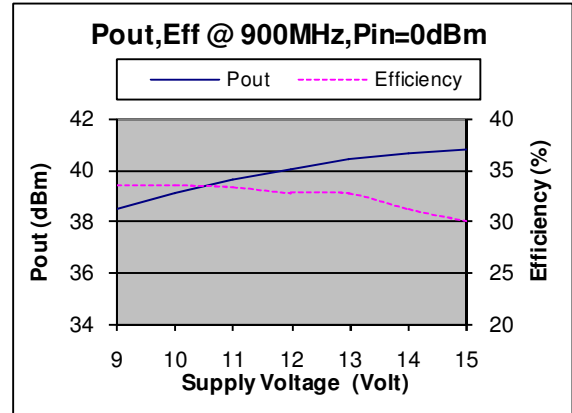
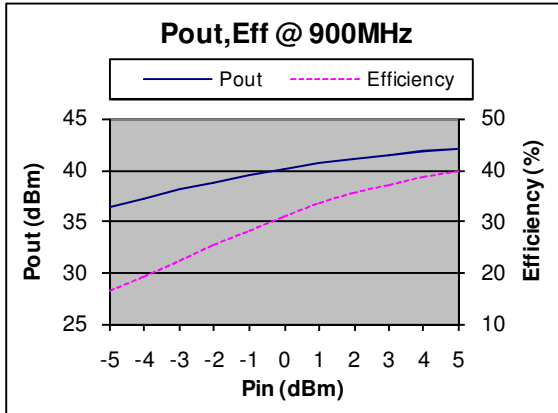
### Typical Performance @ +25 °C



### Typical Performance @ +25 °C



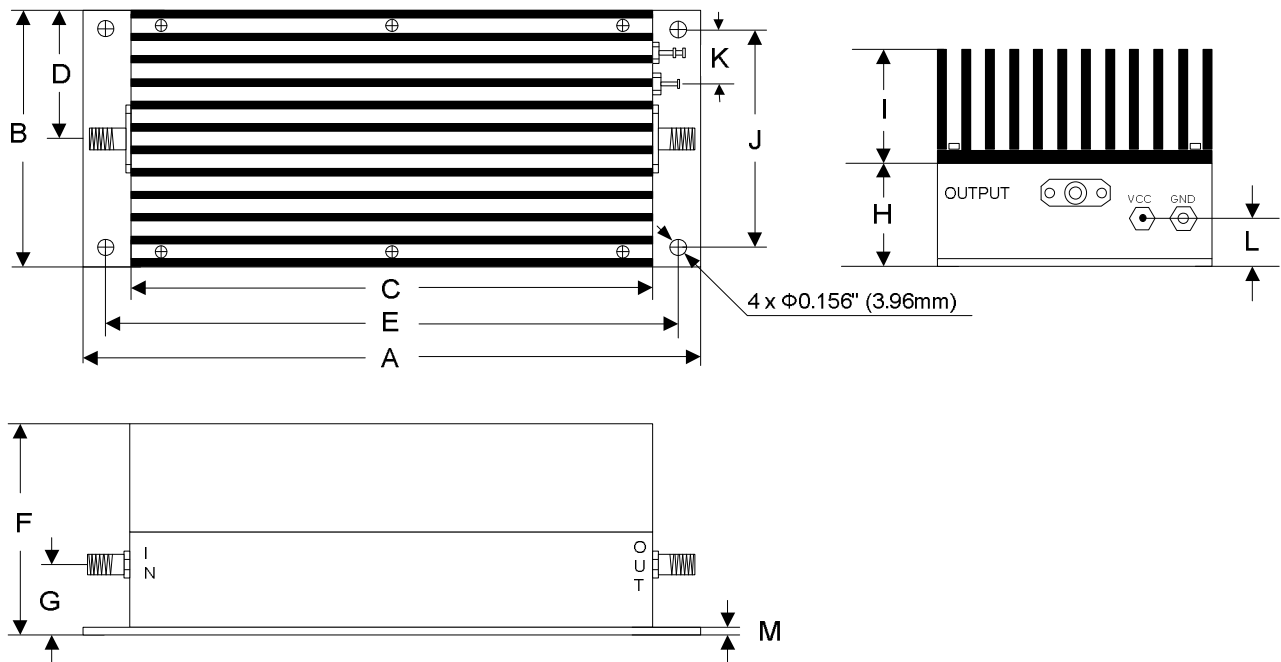
### Typical Performance @ +25 °C



### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
Supply Voltage	+16V
Operating Temperature	-30 °C to +65 °C
Storage Temperature	-55 °C to +100 °C

### Outline



	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>
<b>Inch</b>	7.000	3.250	6.000	1.625	6.500	2.000	0.650	1.000	1.000
<b>mm</b>	177.80	82.55	152.40	41.28	165.10	50.80	16.51	25.40	25.40
	<b>J</b>	<b>K</b>	<b>L</b>	<b>M</b>					
<b>Inch</b>	2.750	0.625	0.450	0.090					
<b>mm</b>	69.85	15.88	11.43	2.29					