

HD29177

2.0GHz–3.0GHz, 700mW RF Amplifier

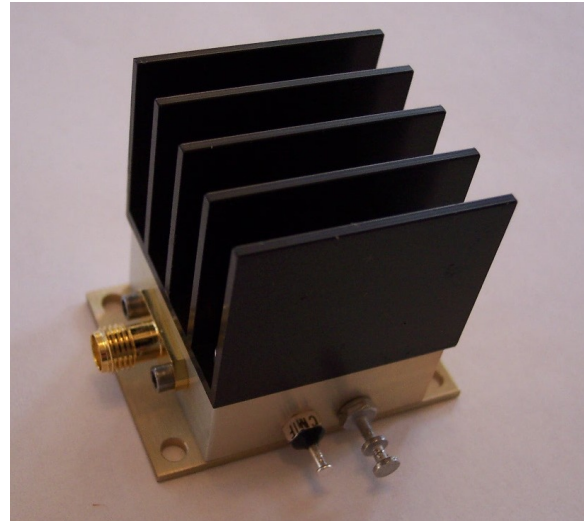
Features

- Frequency Range: 2.0 – 3.0GHz
- Gain: 24dB
- P_{1dB}: +28.5dBm
- IP3: +42dBm
- Noise Figure: 6dB
- Input/Output VSWR: 1.7:1/1.9:1
- DC Power: 5V
- SMA Connector

Performance Tested @ 2.5GHz

Description

HD29177 is +28.5dBm (700mW) output RF Amplifier operates with frequency range from 2.0GHz to 3.0GHz.



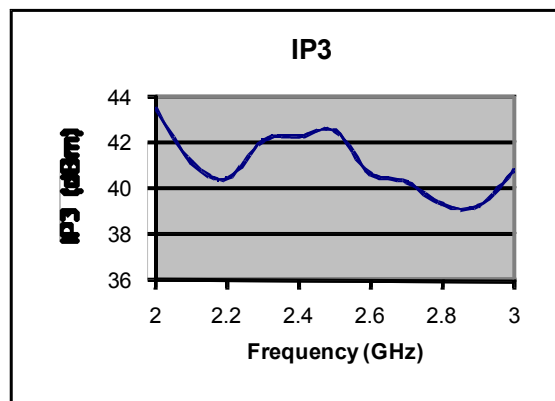
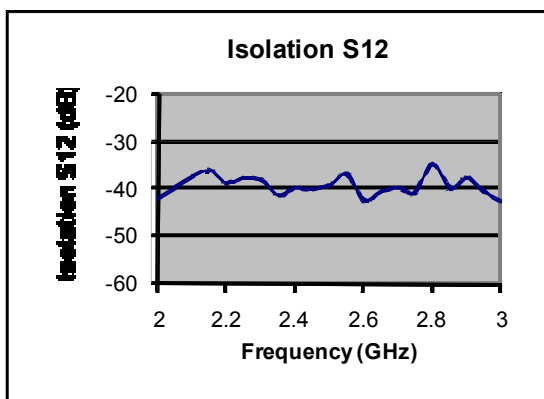
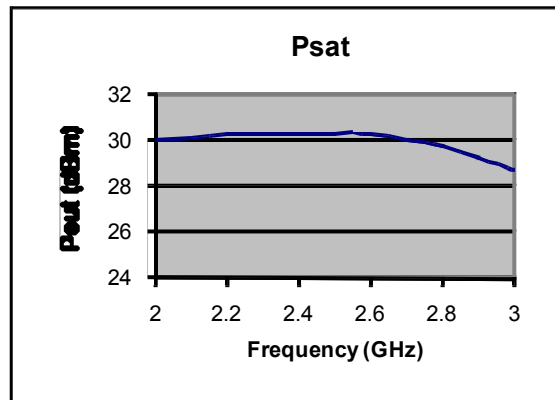
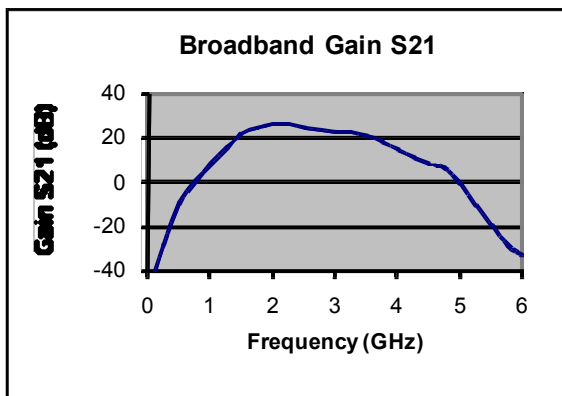
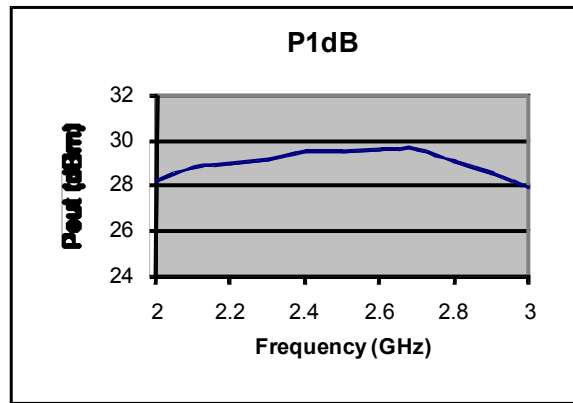
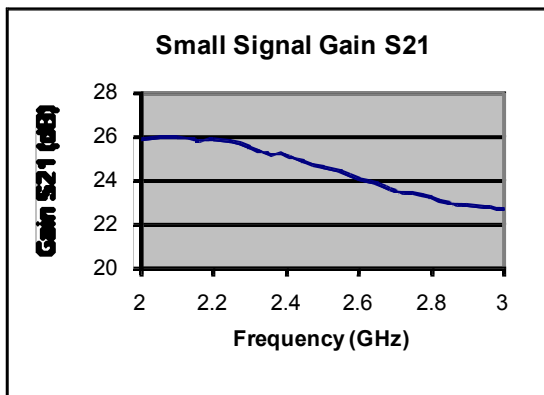
Electrical Specifications @ +25 °C, Z_S = Z_L * = 50 Ω, V_{cc}=+5V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	2.0		3.0
Small Signal Gain	f = 2.0GHz		25.5	
	f = 2.5GHz		24.0	
	f = 3.0GHz		22.0	
P _{1dB}	dBm		+28.5	
OIP3	dBm		+42	
Noise Figure at 1.85GHz	dB		6.0	
Reverse Isolation	dB		-39	
VSWR	f = 2.5GHz		1.7:1	
	Input			
	Output		1.9:1	
DC Power Supply	V	4.5	5.0	5.5
Supply Current	Quiescent (no RF)	mA	210	
	@ P _{out} = +28.5dBm	mA	480	

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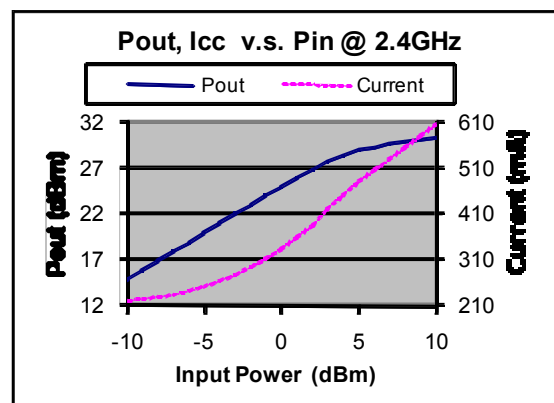
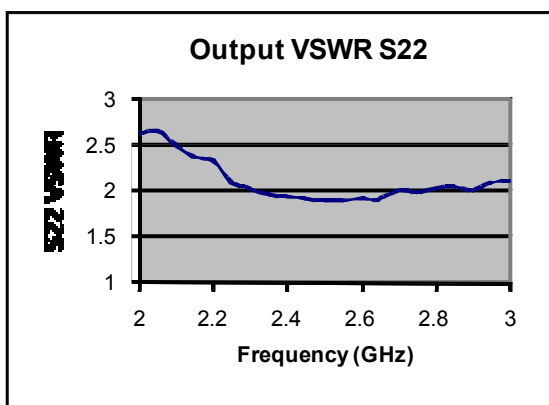
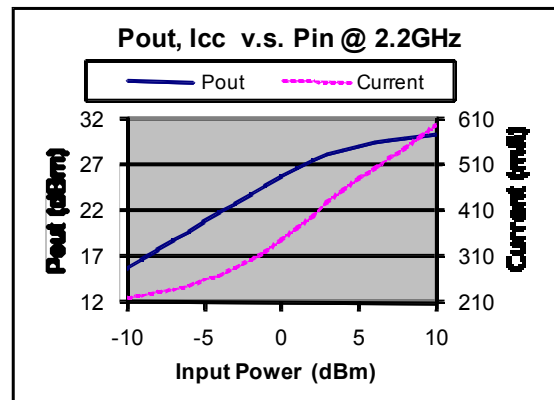
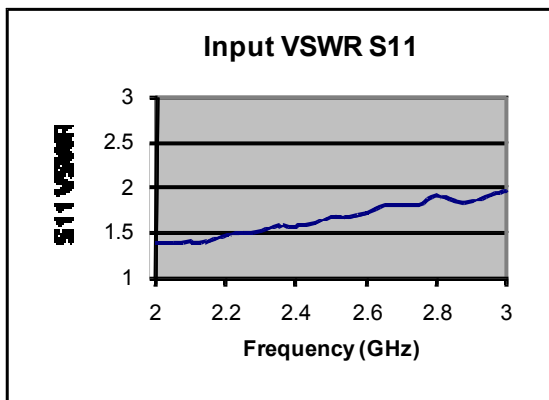
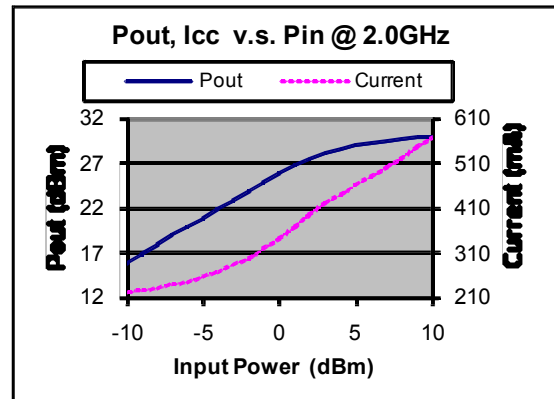
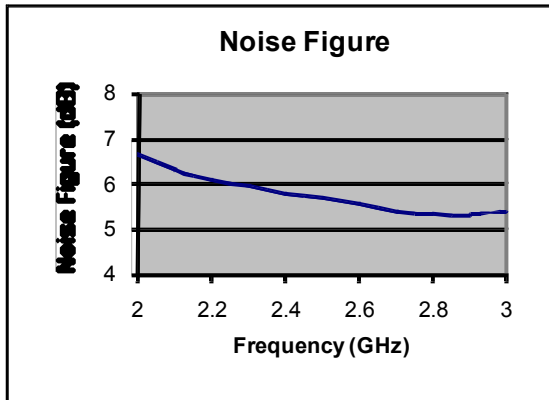
Typical Performance @ +25 °C



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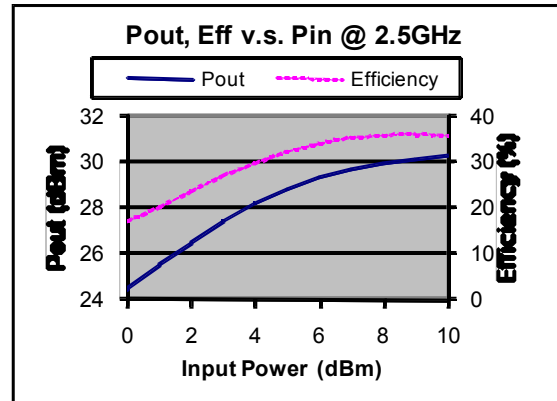
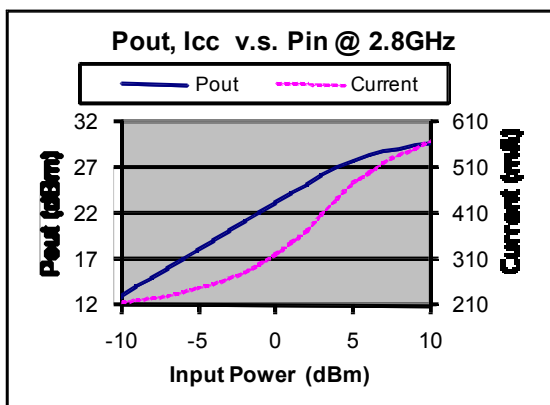
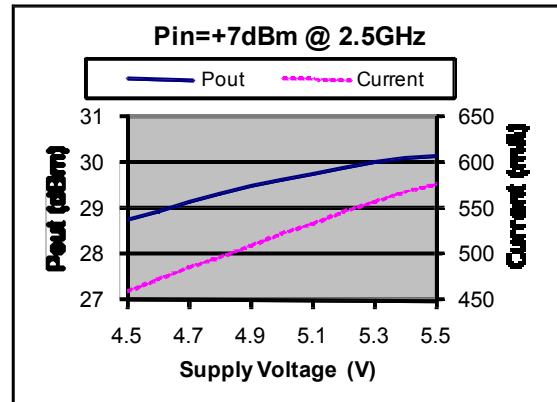
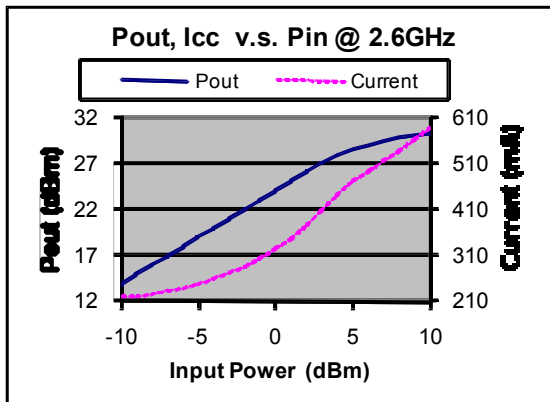
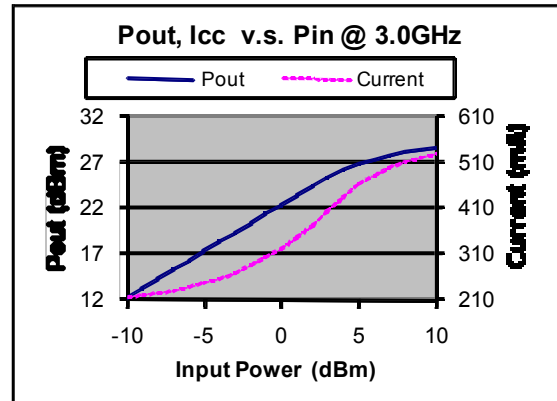
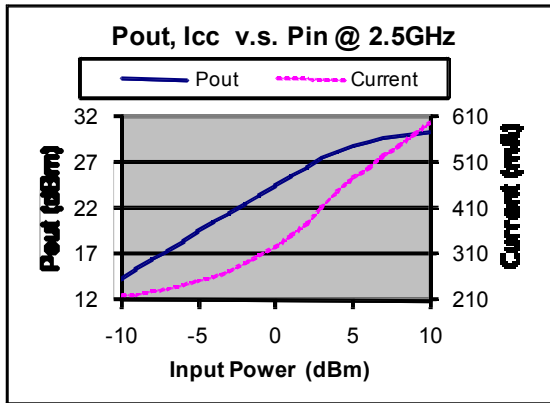
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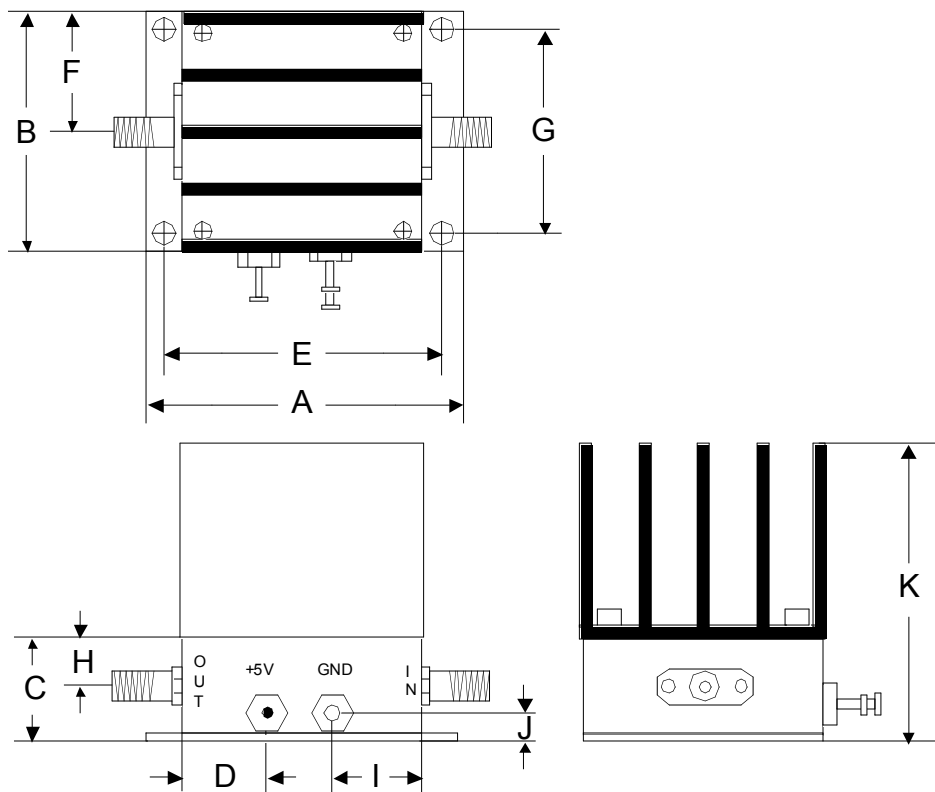
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
Supply Voltage	+6V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +100 °C

Outline



	A	B	C	D	E	F	G	H	I	J	K
Inch	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187	1.563
mm	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76	39.70