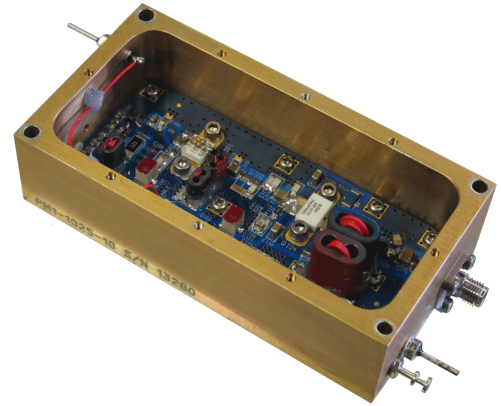


**HD29347**  
**1 to 1025MHz, 10W**  
**Solid State**  
**High Power Module Amplifier**

The HD29347 is a 10W, Class A linear amplifier module for the 1MHz to 1025MHz band. It offers superior performance with high gain and power in a small module footprint using advanced broadband matching techniques and the finest gold MOSFET transistors available on the market today. Matched for 50 ohms input and output, the HD29347 provides a typical 10watts P1dB making this the natural choice for your ultra broadband application.



Specifications				
(Vsupply=+28VDC, Idq=2.7A, Pout=10W CW, TBase=25°C)				
Parameter	Min.	Typ.	Max.	Unit
Frequency	1		1025	MHz
Pout CW P1dB	9	11		Watts
Power In		-2.5		dBm
Gain	40	42.5		dB
Gain Flatness		+/-1.5		dB
Drain Current		2.9		Amps
Input Return Loss			-14	dB
Supply Voltage	24	28	30	Volt
2 <sup>nd</sup> Harmonic	See 5 & 10 watt graph page 3			
3 <sup>rd</sup> Harmonic	See 5 & 10 watt graph page 3			
Dimensions	2.15" x 4.15" x 1.16" 54.6mm x 105.4mm x 29.5mm			

## Features

- 10 Watts P1dB Class A
- 50 ohms input/output
- Bandwidth 1 to 1025MHz
- Optional Disable (+5VDC)
- All Gold MOSFETS for Maximum Reliability

Maximum Ratings	
Parameter	Units
Pout CW	12.5 watts <sup>(1)</sup>
Supply Voltage	30VDC
Bias Current	2.7 Amp
Drain Current	3.2 Amp
Load Mismatch <small>All phase angles, current limited to 3.2 Amps for 2 seconds</small>	10:1
Storage Temp.	-40°C to +105°C
Case Oper. Temp.	0°C to +65°C

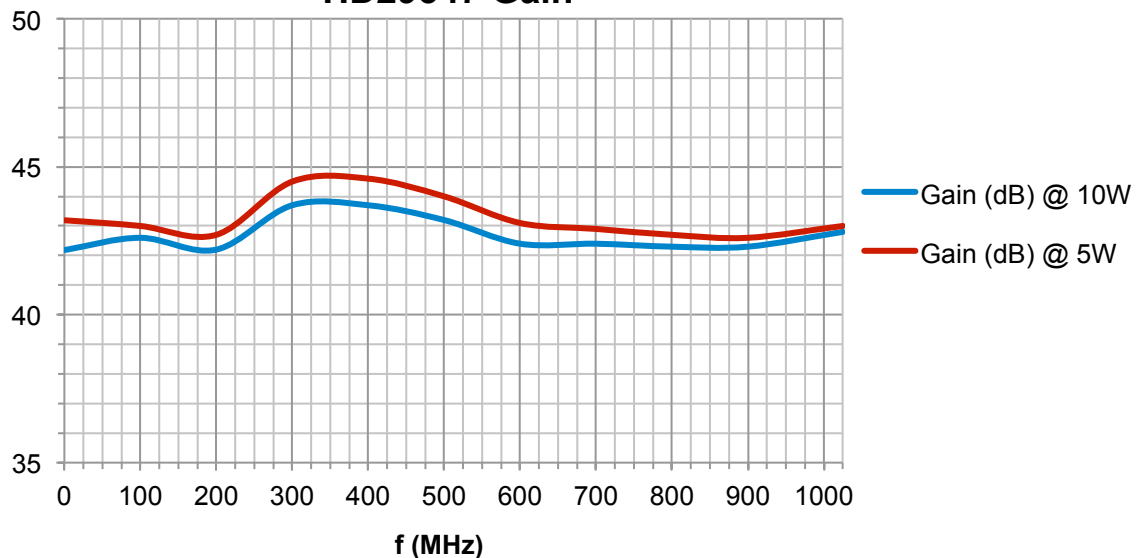
Performance , +24VDC supply

Performance , +30VDC supply

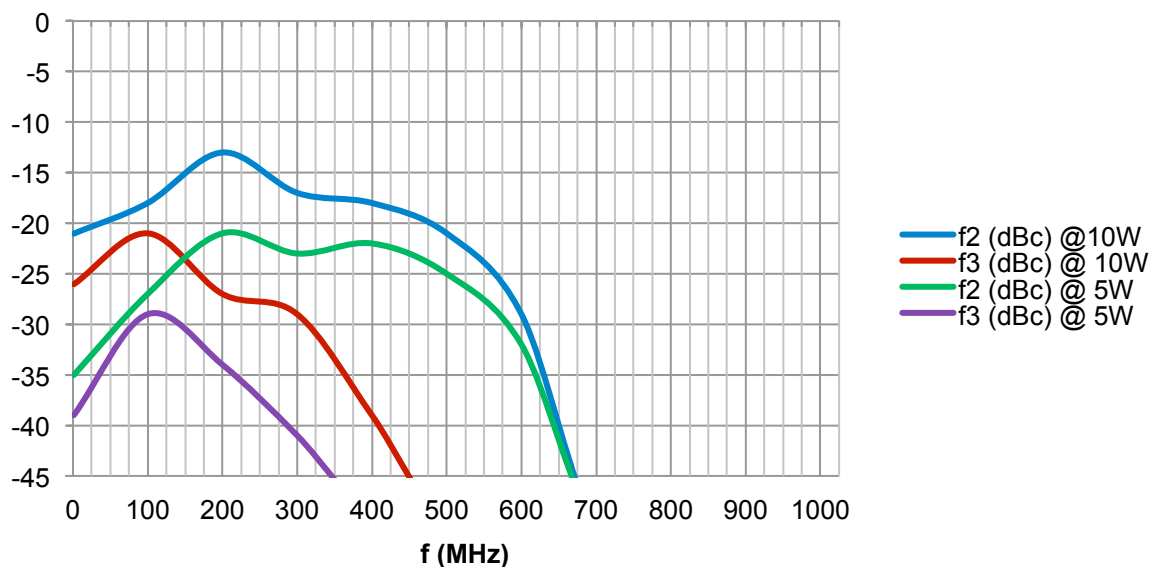
Specifications (Vsupply=+24VDC, Idq=2.7A, Pout:7.5wW CW, TBase=25°C)				
Parameter	Min.	Typ.	Max.	Unit
Frequency	1		1025	MHz
Pout CW P1dB	+6.5			Watts
Power In		-4.2		dBm
Gain	40	43		dB
Gain Flatness		+/-1.5		dB
Drain Current		2.9		Amps
Input R/L			-14	dB
2 <sup>nd</sup> Harmonic		-20	-10	dBc
3 <sup>rd</sup> Harmonic		-27	-18	dBc

Specifications (Vsupply=+30VDC, Idq=2.7A, Pout=10W CW, TBase=25°C)				
Parameter	Min.	Typ.	Max.	Unit
Frequency	1		1025	MHz
Pout CW P1dB	+9.5	11.5		Watts
Power In		-2.5		dBm
Gain	40	42.5		dB
Gain Flatness		+/-1.5		dB
Drain Current		2.9		Amps
Input R/L			-14	dB
2 <sup>nd</sup> Harmonic		-24	-14	dBc
3 <sup>rd</sup> Harmonic		-30	-20	dBc

**HD29347 Gain**

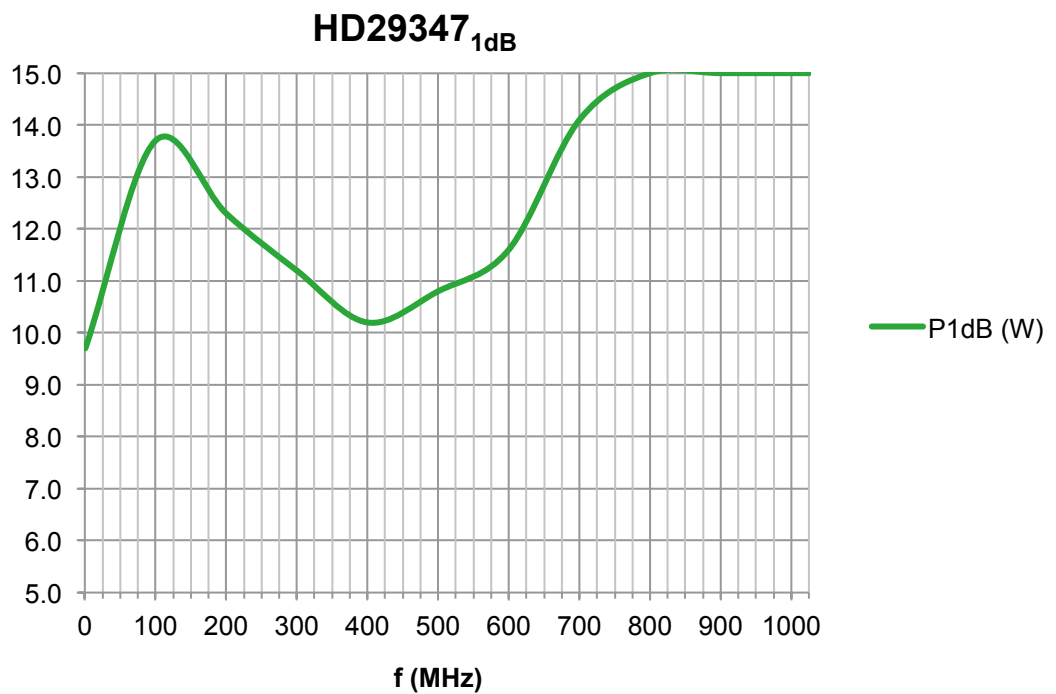


**HD29347 Harmonics**





**HD29347**  
**1 to 1025MHz, 10W**  
**Solid State**  
**High Power Module Amplifier**



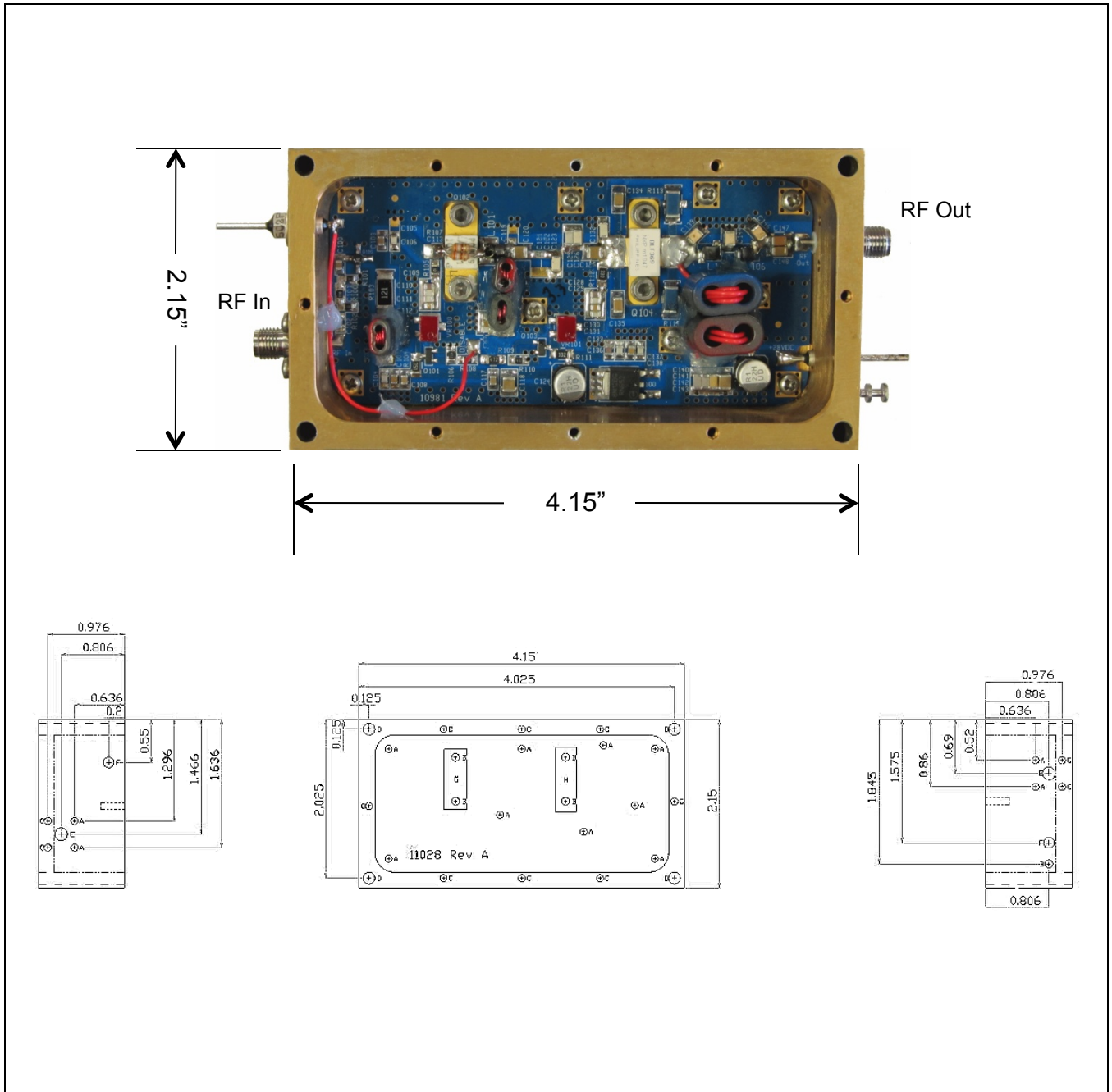
**Notes:**

1. The maximum recommended operational output power is 12.5 watts CW. For operation greater than 12.5 watt CW please consult the factory.

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**1 to 1025MHz, 10W**  
**Solid State**  
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