

DAMH9350

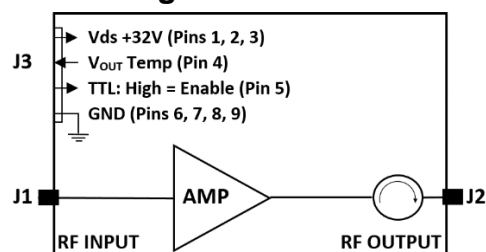
X-Band Amplifier

FEATURES

- Frequency Range 8.5 – 10 GHz
- Output Power 80 W Min
- Power Gain 35 dB Min
- PAE 25 % Typical
- Input Survivability +30 dBm
- Output Survivability ∞ VSWR
- GaN Technology
- Super SMA Replaceable Connectors



Block Diagram

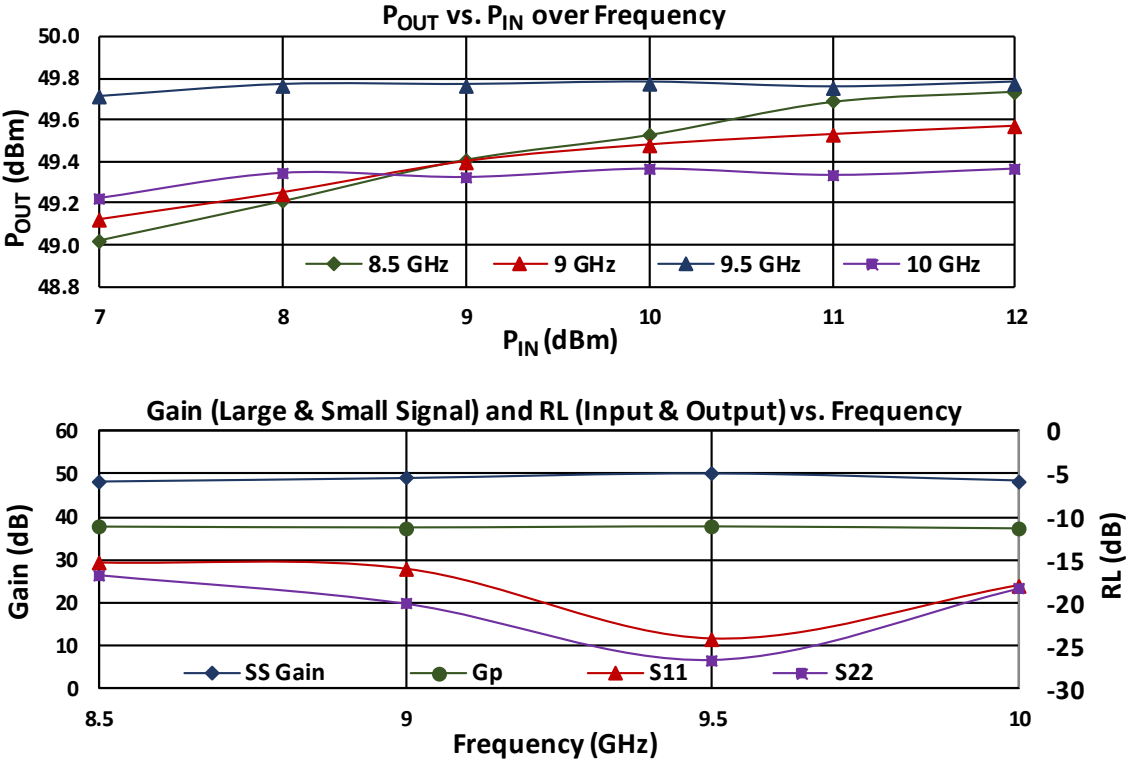


Electrical Characteristics and Mechanical Specifications

RF Characteristics ¹				
Parameter	Min.	Typ.	Max.	Units
Output Power	49	49.5		dBm
Power Gain	35	37.5		dB
Small Signal Gain (P _{IN} = -20 dBm)	43	46		dB
Small Signal Gain Flatness		± 1.10	± 1.25	dB
PAE	20	25		%
DC Current		11.5	15	A
Droop		0.2	0.4	dB
Rise Time		30	100	ns
Fall time		65	100	ns
Enabled Response time		450	500	ns
Harmonic (2 nd)		-54	-30	dBc
Spurious		-70	-60	dBc
Input Return Loss		-15	-12	dB
Output Return Loss		-20	-12	dB
Output Power Temperature Coefficient ²		- 0.010		dB / °C
Absolute Maximum Ratings ¹				
Parameter	Rating			Units
Input Power	+30			dBm
DC Voltage	+25 to +34			V
DC Current	15			A
Operating Temperature (Base Plate)	-40 to +85			°C
Storage Temperature	-55 to +150			°C
Humidity	95			%
Mechanical Specifications				
Dimension	3.9 IN. L x 2.9 IN. W x .875 IN. H			
RF Input Connector	Super SMA (Replaceable)			
RF Output Connector	Super SMA (Replaceable)			
DC Connector	DB9			
Pins 1, 2, 3	Vds (+32 V)			
Pin 4	VOUT Temperature			
Pin 5	TTL Input: High = Enable			
Pins 6, 7, 8, 9	Return (Ground)			

1. Test Conditions: P_{IN} = 12 dBm (Typ.), Pulse Width = 100 us, Duty Cycle = 10%, Vds = +32 V (Typ.), Temp = +25°C.
 2. Temp range: +25°C to +85°C

Typical Performance



Outline Drawing (Dimensions are in Inches)

