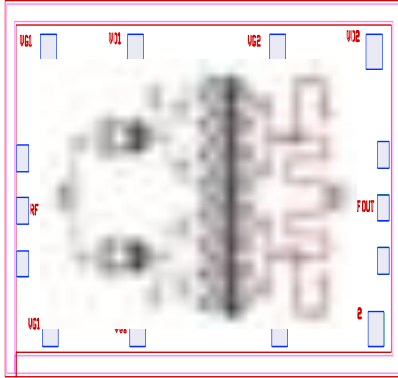


ADVANCE INFORMATION

Version 0.2



KEY FEATURES:

- Frequency Range: 8.5GHz - 11GHz
- 41dBm P1dB output power
- 24dB small signal Gain
- Size: 4mm X 4.4mm X 0.1mm

DESCRIPTION:

The VRFA0026-BD is a two-stage high power amplifier which operates within the frequency range of 8.5GHz to 11GHz manufactured on a 0.25 μm GaAs pHEMT process. The circuit demonstrates P1dB performance of 41dBm and exhibits a simulated Psat of 42dBm across the frequency band. Both stages of the amplifier are simulated to be unconditionally stable.

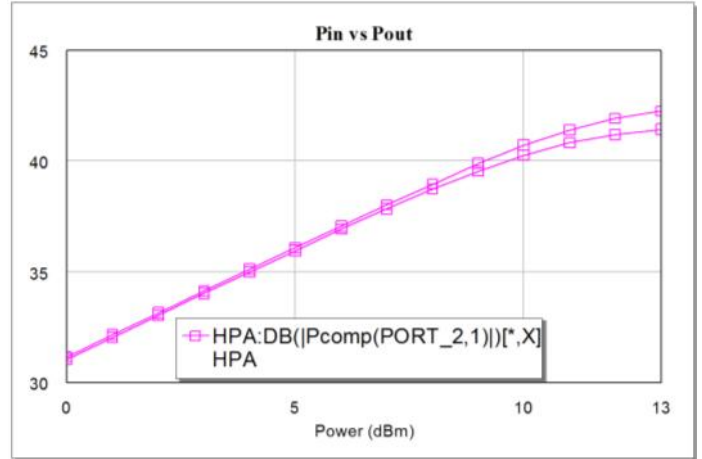
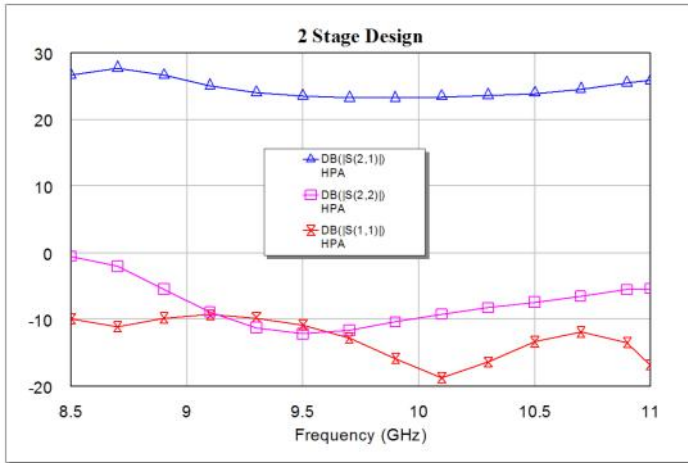
ELECTRICAL SPECIFICATIONS:

Parameter	Specification			Unit
	Max.	Typ.	Min.	
Frequency Bandwidth	8.5		11	GHz
Small Signal Gain		24		dB
Output power for 1dB		41		dBm
Saturated Output Power (Psat)		42		dBm
I/P Return Loss		-10		dB
Power Added Efficiency (PAE)		38		%

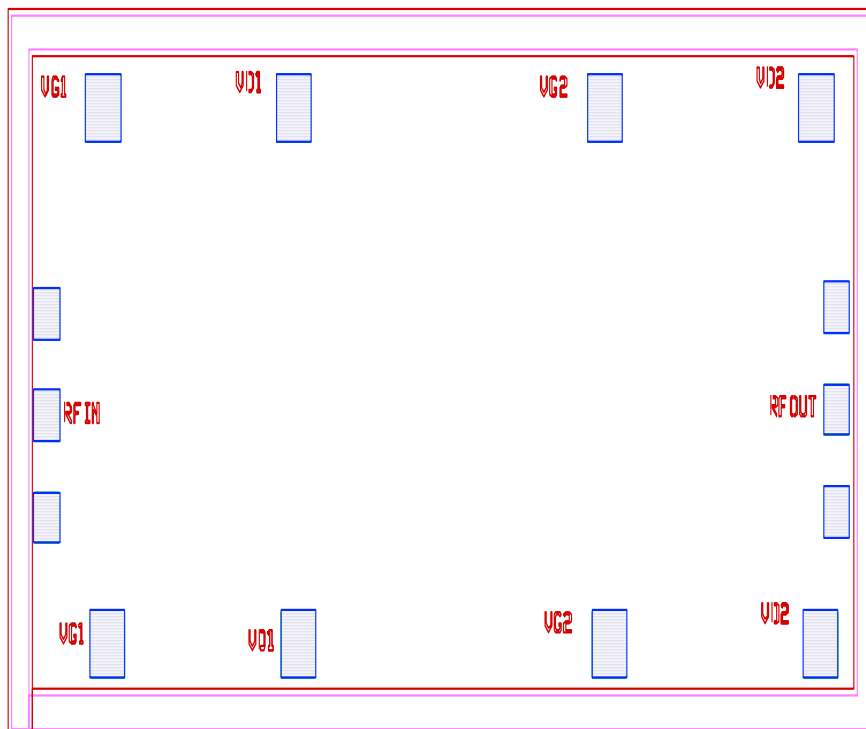
Notes: Specifications are at 25°C, $V_{DD} = +8V$ @ 2A

PERFORMANCE:

TA = 25°C, V_{DD} = +8V, I_{DD} = 2A



CHIP ASSEMBLY AND BONDING DIAGRAM:



DC pads: 100µm x 100µm