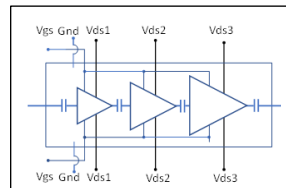


LEO PA MMIC

25.5 GHz to 28.5 GHz



Product Description

The iNF20101 is a 3-stage GaAs high-power amplifier MMIC which operates from 25.5 to 28.5 GHz. The amplifier provides a typical small signal gain of >22 dB and Psat >33dBm.

Applications

- LEO station systems
- New 5G radio link, 5G FR2

Key Features

Parameter	Value	Unit
Vdd/Idq	6/2.4	V/A
Frequency	25.5 - 28.5	GHz
Small signal S21	22 - 24	dB
Large signal S21 @Pin=15dBm	17.5 - 20	dB
Psat @-3dB, CW	≥ 33	dBm
Die size	6.04 x 4.38	mm ²

Absolute Maximum Ratings

Parameter	Symbol	Value			Unit
		Min	Typ.	Max	
Supply voltage	Vdd			7	V
Operating temperature	Ta	-30		+85	C

Nominal Operating Parameters:

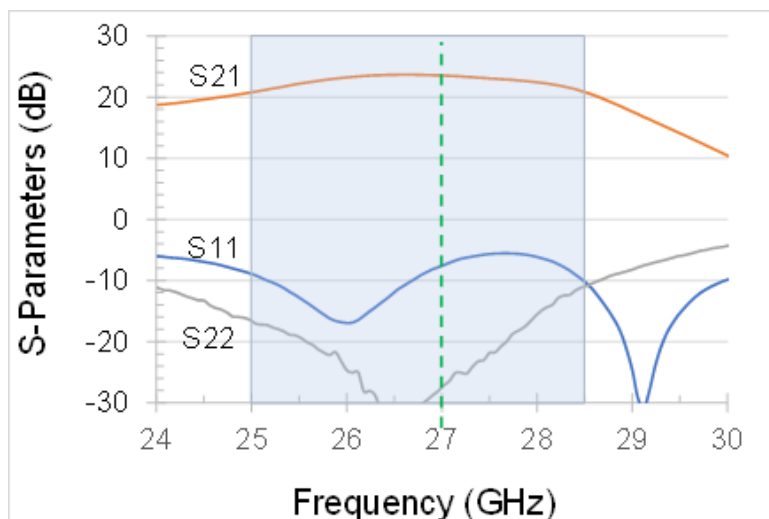
Parameter	Symbol	Value			Unit
		Min	Typ.	Max	
Supply voltage	Vgs	-0.5	-0.45	-0.4	V
Supply voltage	Vds		6		V

Electrical Characteristic (T_{SUBSTRATE} = 25 °C except as noted)

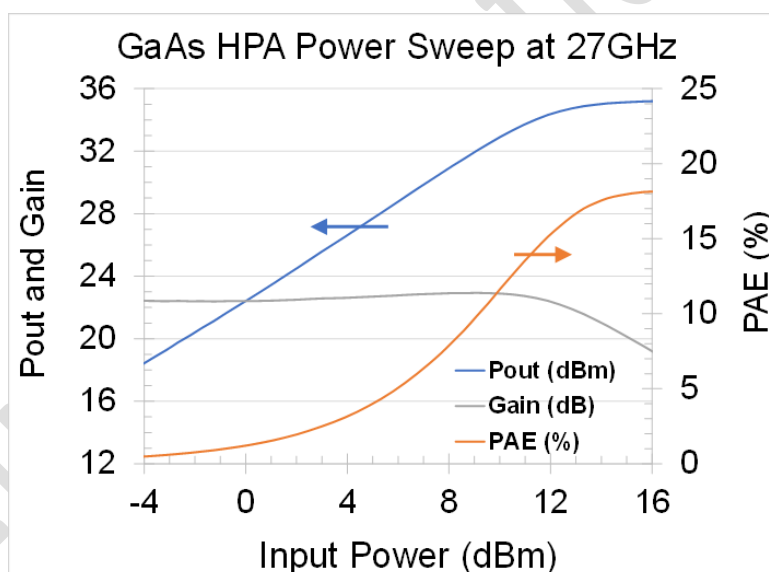
Parameter	Symbol	Test Conditions	Value			Unit
			Min	Typ.	Max	
Input return loss	S11	f=27 GHz		-6		dB
Small signal gain	S21	f=27 GHz		24		dB
Output return loss	S22	f=27 GHz		< -22		dB

1) Performance will vary based on assembly technique and substrate of choice.

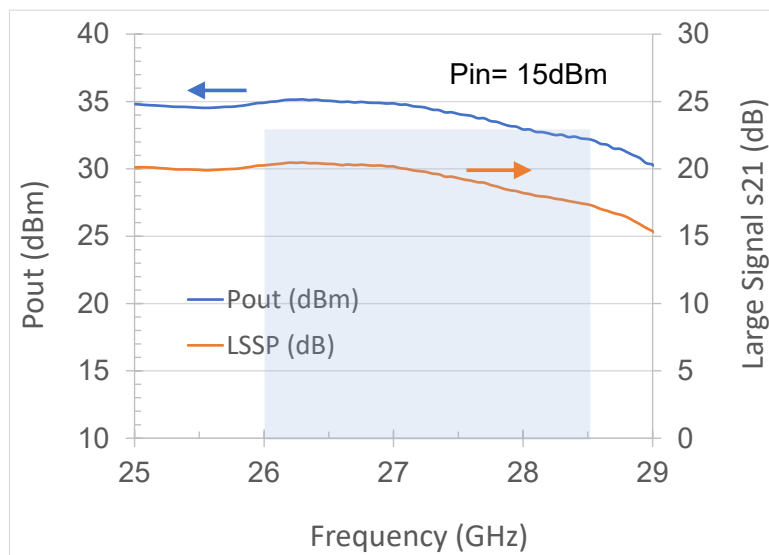
S-PARAMETERS



POUT, PAE, and GAIN



LARGE SIGNAL FREQ SWEEP @ Pin=15dBm



DIE DIMENSIONS

