

ANGI085096-P52

X-Band matched GaN Device

Features:

Frequency: 8.5~9.6GHz

Saturated Output Power: Psat≥52dBm

PowerGain: Gain≥8.5dB Add-Efficiency: PAE≥36% Port Matching: Zin/Zout=50Ω

Description:

ANGI085096-P52 is an internal matching GaN device, which adopts advanced co-planar internal matching MCM and thin film circuit technology. The typical working frequency range is 8.5~9.6GHz. This device can be used in different RF/Microwave system and subsystem.

The high output power level, high efficiency and wide operating temperature range can make application very flexible.

Maximun Ratings (TC=25°C, Not recommended working under this condition):

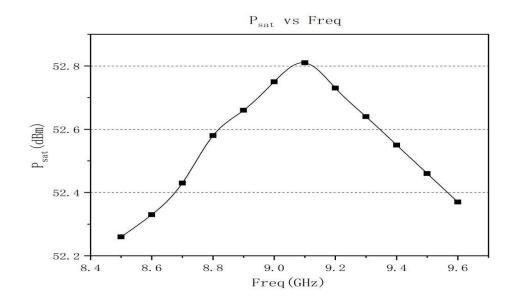
	Symbol	Value	Unit
Voltage between source and drain	V _{DS}	40	V
Voltage between gate and source	V _{GS}	-5	V
Storage Temperature Range	T_{stg}	-65 to +175	°C
Drain and Source Channel Temperature	Tch	175	°C



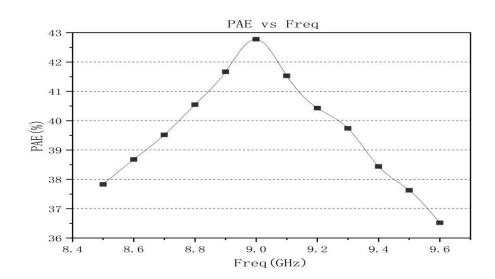
Electrical Characteristics:

				Value		
	Symbol	Test condition	Min	Тур	Max	Unit
Drain Current	turated Output Power Psat Vds=28V PW.	-	13.6	-	А	
Saturated Output Power		52	-	-	dBm	
Gain	Gp	T=1ms, Duty=10% Pin: 43.5dBm Freq: 8.5~9.6GHz	8.5	-	ı	dB
Add-Efficiency	PAE		36	-	ı	%
Gain Flatness	ΔG		-0.8	-	+0.8	dB

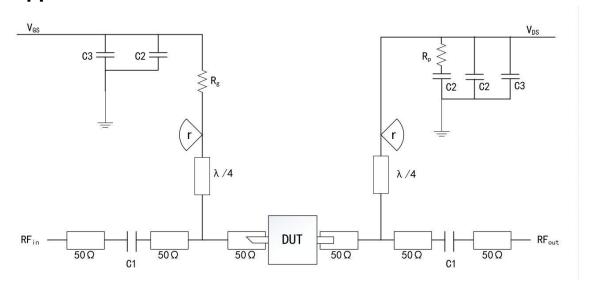
Typical Curve:



Internal Matching GaN Device



Application Circuit:



DUT: Device to be tested

C1:1pF R_p :51 Ω

C2:1000pF $R_G:15\Omega$

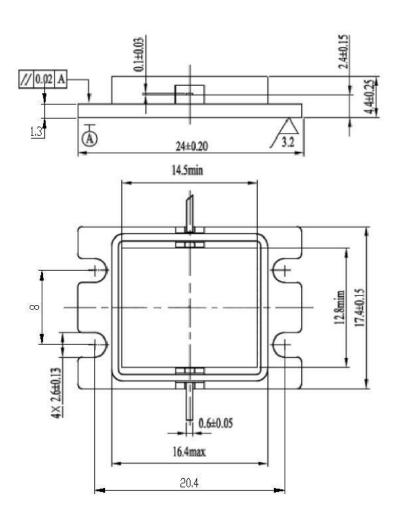
C3:100uF r(radius)≈3.5mm(Rogers5880, 20mil)



ESD Level:

ESD	Class III	2000V

Outline:



Precautions for use:

- Pay attention to drying transportation and storage.
- Pay attention to anti-static during chip use and assembly, and wear grounding anti-static bracelet.
- When powering up, first apply grid power then add leakage.