ANGI095105-P50

X-Band matched GaN Device

Features:

Frequency: 9.5~10.5GHz
Saturated Output Power: P_{sat}≥50dBm
PowerGain: Gain≥8.5dB
Add-Efficiency: PAE≥35%
Port Matching: Z_{in}/Z_{out}=50Ω

Description:

ANGI095105-P50 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 9.5~10.5GHz. 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.

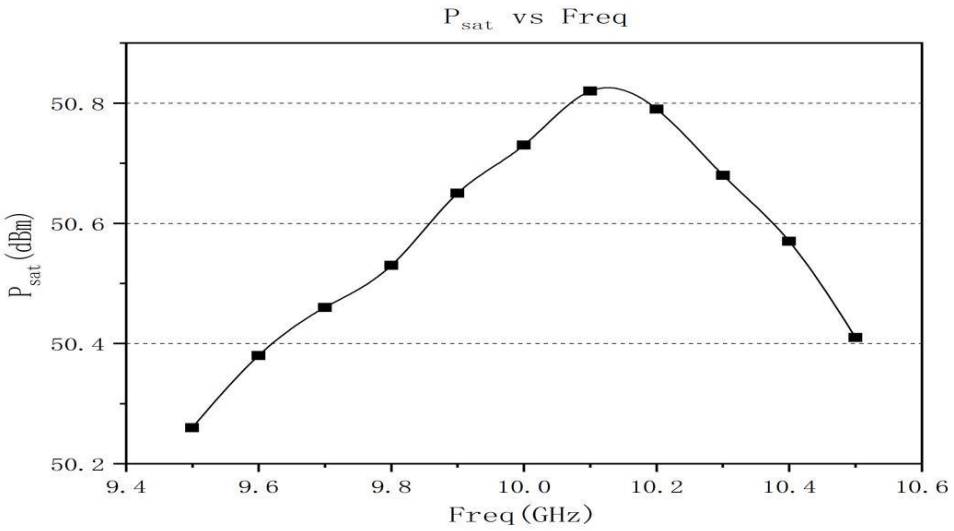
Maximun Ratings (TC=25℃, Not recommended working under this condition):

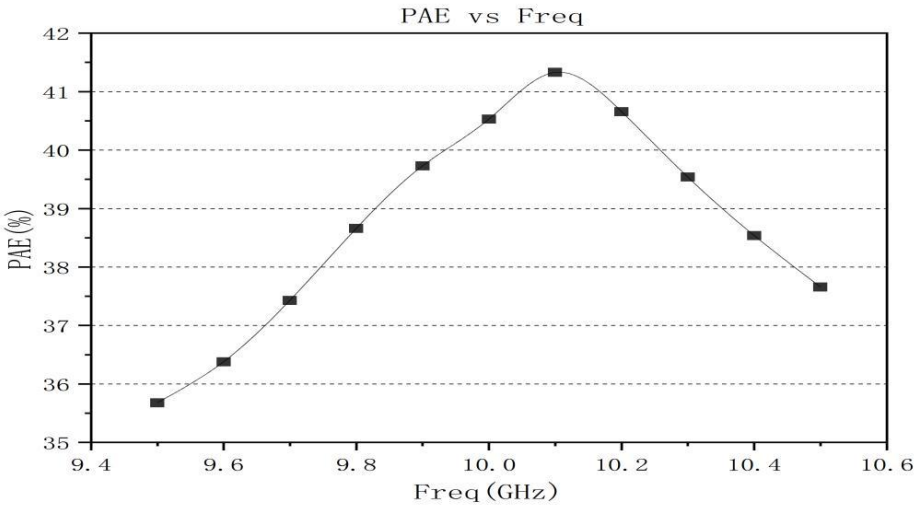
	Symbol	Value	Unit
Voltage between source and drain	V_{DS}	40	V
Voltage between gate and source	V_{GS}	-5	V
Storage Temperature Range	T_{stg}	-65 to +175	℃
Drain and Source Channel Temperature	T_{ch}	175	℃

Electrical Characteristics:

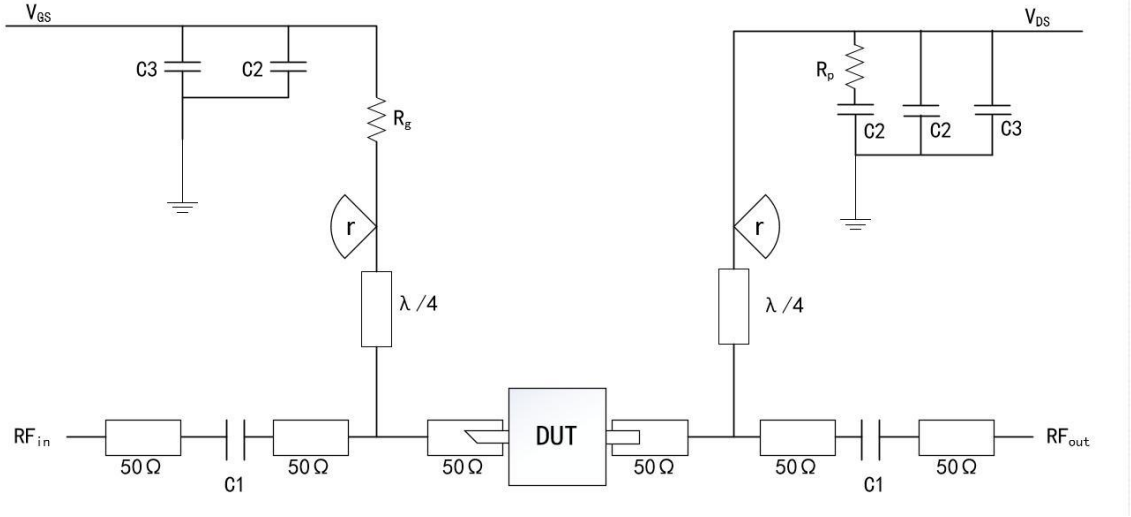
	Symbol	Test condition	Value			Unit
			Min	Typ	Max	
Drain Current	Idsr	Vds=28V PW. T=1ms, Duty=10% Pin: 41.5dBm Freq：9.5~10.5GHz	-	8.8	-	A
Saturated Output Power	Psat		50	-	-	dBm
Gain	Gp		8.5	-	-	dB
Add-Efficiency	PAE		35	-	-	%
Gain Flatness	ΔG		-0.8	-	+0.8	dB

Typical Curve:





Application Circuit:



DUT: Device to be tested

C1:1pF

C2:1000pF

C3:100uF

R_p:51Ω

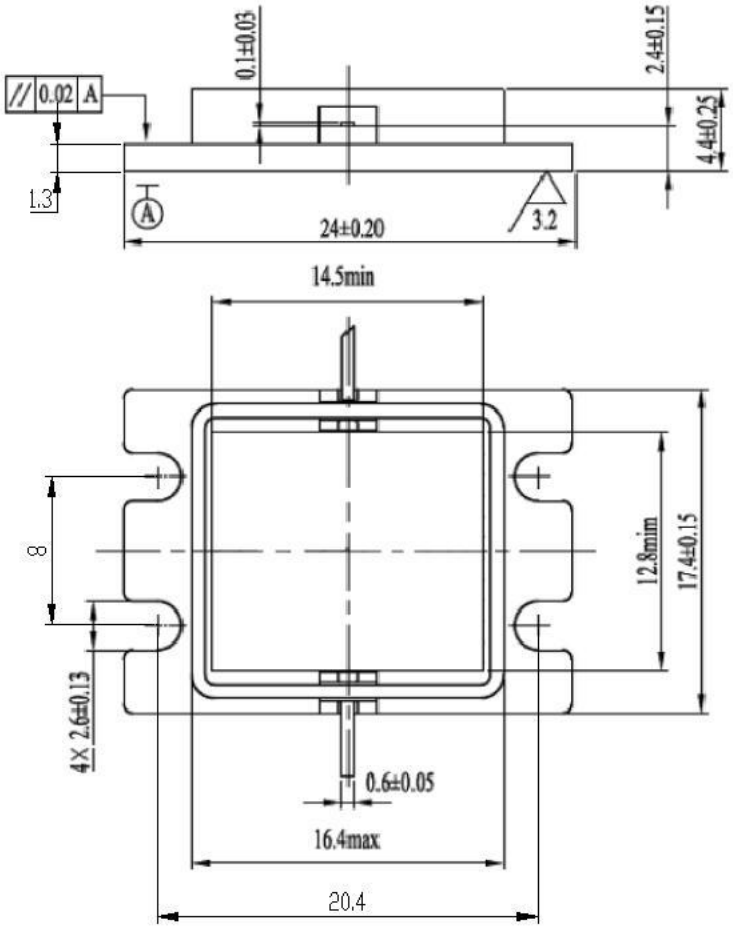
R_G:15Ω

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.