

## ANGI064072-P50

#### **C-band matched GaN Device**

#### **Features:**

Frequency: 6.4~7.2GHz

Saturated Output Power: Psat≥50dBm

PowerGain: Gain≥9dB

Add-Efficiency: PAE≥40%

Port Matching:  $Z_{in}/Z_{out} = 50\Omega$ 

### **Description:**

ANGI064072-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 6.4~7.2GHz. 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):

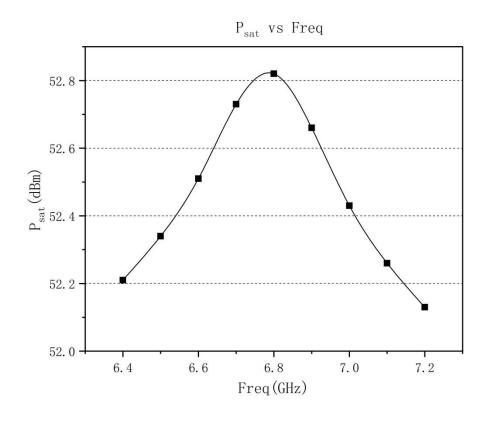
	Symbol	Value	Unit
Voltage between source and drain	V <sub>DS</sub>	40	V
Voltage between gate and source	V <sub>GS</sub>	-5	V
Storage Temperature Range	$T_{stg}$	-65 to +175	°C
Drain and Source Channel Temperature	Tch	175	°C



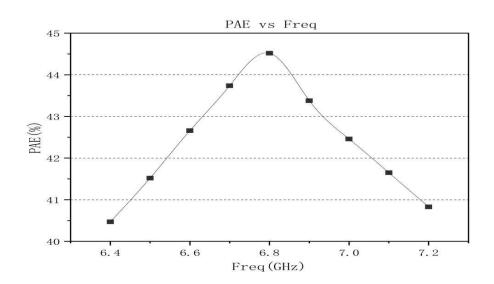
## **Electrical Characteristics:**

				Value		
	Symbol	Test condition	Min	Тур	Max	Unit
Drain Current	ldsr		-	7.7	-	А
Saturated Output Power	Psat	Vds=28V PW.	50	-	-	dBm
Gain	T=1ms, Duty=10%  Gp  Pin: 41dBm	9	-	-	dB	
Add-Efficiency	PAE	Freq: 6.4~7.2GHz	40	-	ı	%
Gain Flatness	ΔG		-0.8	-	+0.8	dB

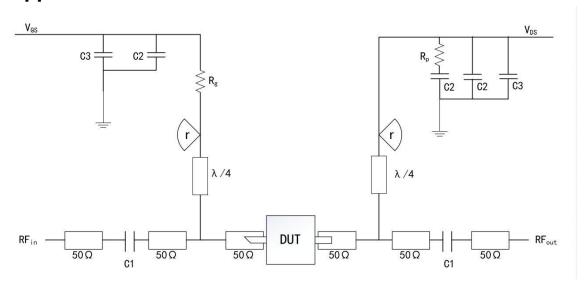
# **Typical Curve:**



# **Internal Matching GaN Device**



# **Application Circuit:**



DUT: Device to be tested

C1:3pF  $R_p$ :51 $\Omega$ 

C2:1000pF  $R_G$ :15 $\Omega$ 

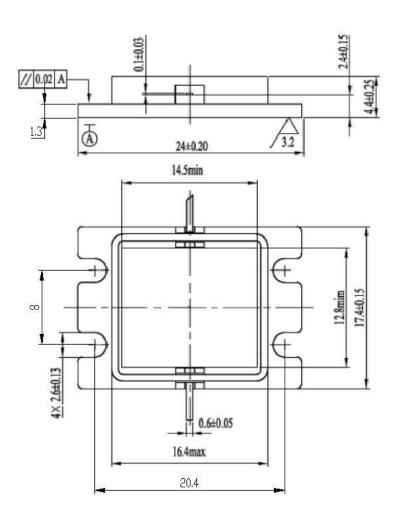
C3:100uF r(radius)≈4.5mm(Rogers5880, 20mil)



#### **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.