



ACGI053059-P41-1

C-band matched GaAs Device

Features:

Frequency: 5.3~5.9GHz

1dB Output Power: P1dB=41dBm(type)

PowerGain: Gain=9dB(type)

Add-Efficiency: PAE=35%(type) Port matching: $Zin/Zout=50\Omega$

Description:

ACGI053059-P41-1 is an internal matching GaAs device, which adopts advanced co-planar internal matching MCM and thin film circuit technology. The typical working frequency range is 5.3~5.9GHz. 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 $^{\circ}$ C, Not recommended working under this condition):

	Symbol	Value	Unit
Voltage between source and drain	Vds	11	V
Voltage between gate and source	Vgs	-3	V
Storage Temperature Range	Tstg	-65 to +150	°C
Drain and Source Channel Temperature	Tch	150	℃

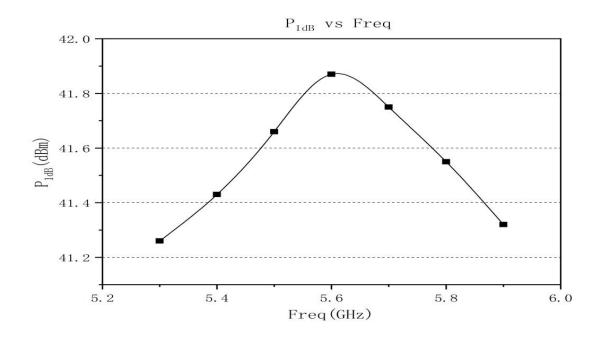




Electrical Characteristics:

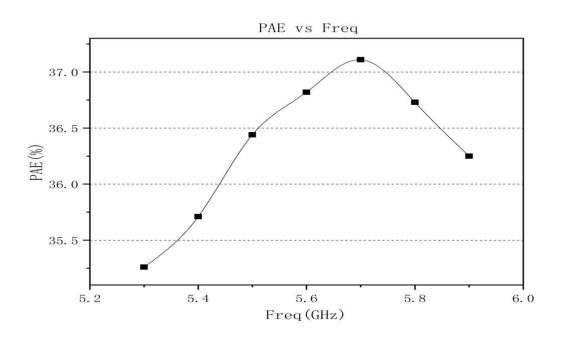
				Value		
	Symbol	Test condition	Min	Тур	Max	Unit
Drain Current	ldsr	Vds=10V CW. Pin: 32dBm Freq: 5.3~5.9GHz	-	3.5	-	Α
1dB output power	P1dB		-	41	-	dBm
Gain	Gp		-	9	-	dB
Add-Efficiency	PAE		-	35	-	%
Gain Flatness	ΔG		-0.8	-	+0.8	dB

Typical Curve:

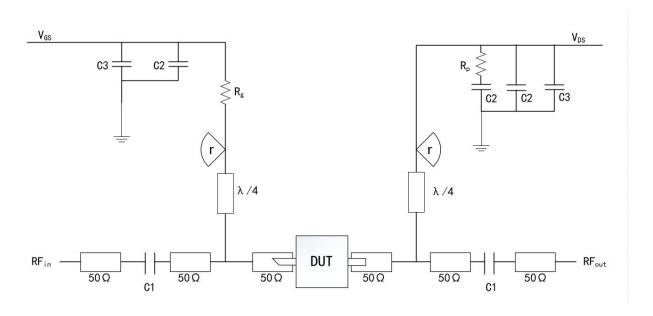




Internal Matching GaAs Device



Application Circuit:



DUT: Device to be tested

C1:4.7pF Rp:51 Ω C2:1000pF Rg:15 Ω

C3:100uF r(radius)≈5.8mm(Rogers5880, 20mil)

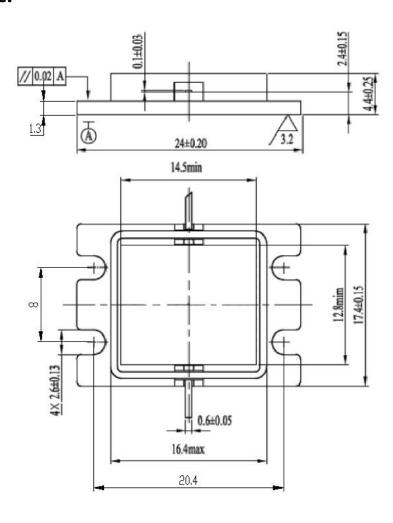
AnserRF

Internal Matching GaAs Device

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.