



## ACGI014015-P39-1

### L-band matched GaAs Device

#### Features:

Frequency: 1.4~1.55GHz

1dB Output Power :  $P_{1dB} \geq 39dBm$

PowerGain: Gain  $\geq 10dB$

Efficiency:  $\eta = 40\%$  (type)

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

#### Description:

ACGI014015-P39-1 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 1.4~1.55GHz. 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.

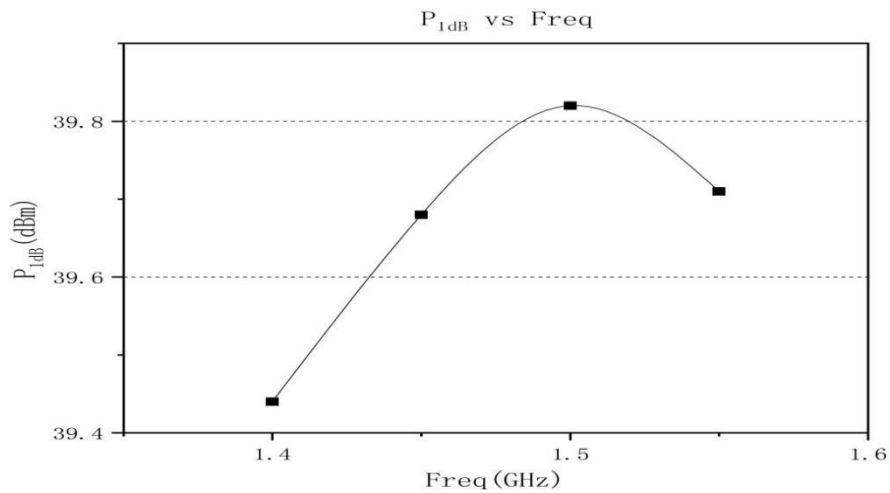
Maximun Ratings (TC=25°C, Not recommended working under this condition):

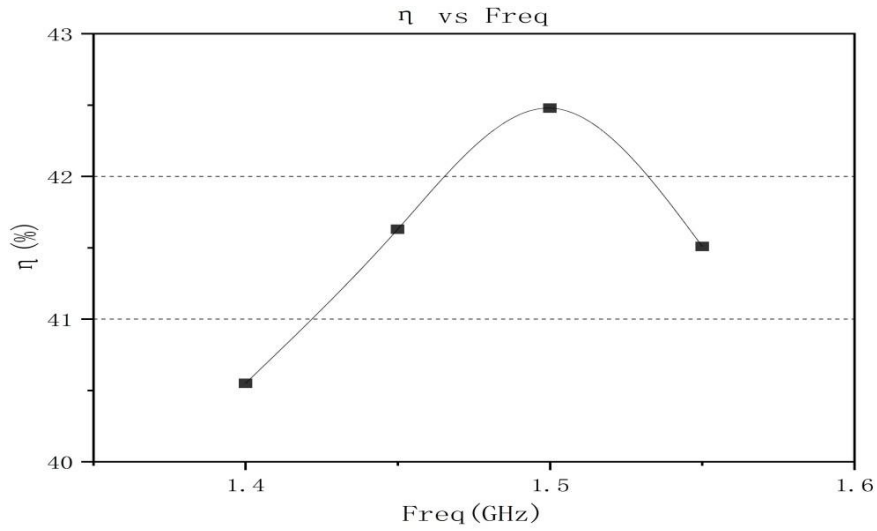
	Symbol	Value	Unit
Voltage between source and drain	$V_{ds}$	11	V
Voltage between gate and source	$V_{gs}$	-3	V
Storage Temperature Range	$T_{stg}$	-65 to +150	°C
Drain and Source Channel Temperature	$T_{ch}$	150	°C

## Electrical Characteristics:

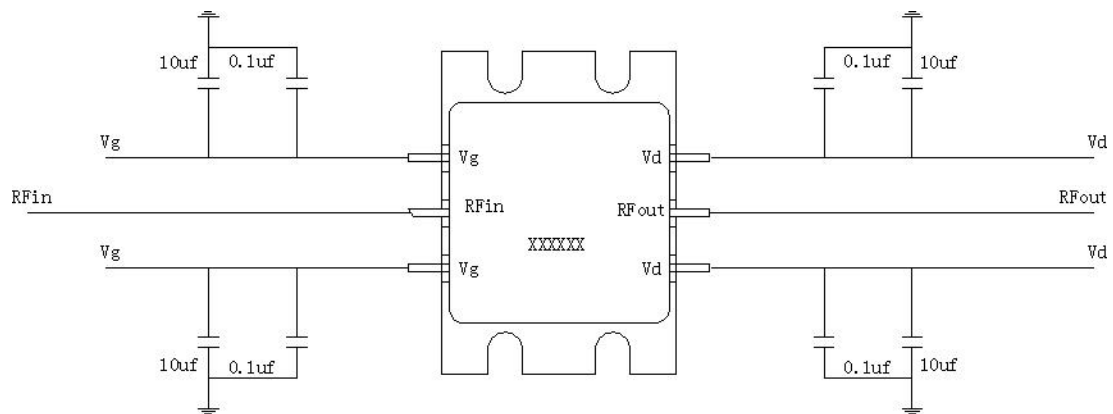
	Symbol	Test condition	Value			Unit
			Min	Typ	Max	
Drain Current	I <sub>dsr</sub>	V <sub>ds</sub> =10V CW. P <sub>in</sub> : 29dBm Freq: 1.4~1.55GHz	-	2	-	A
1dB output power	P <sub>1dB</sub>		39	-	-	dBm
Gain	G <sub>p</sub>		10	-	-	dB
Efficiency	η		-	40	-	%
Gain Flatness	ΔG		-0.8	-	+0.8	dB

## Typical Curve:





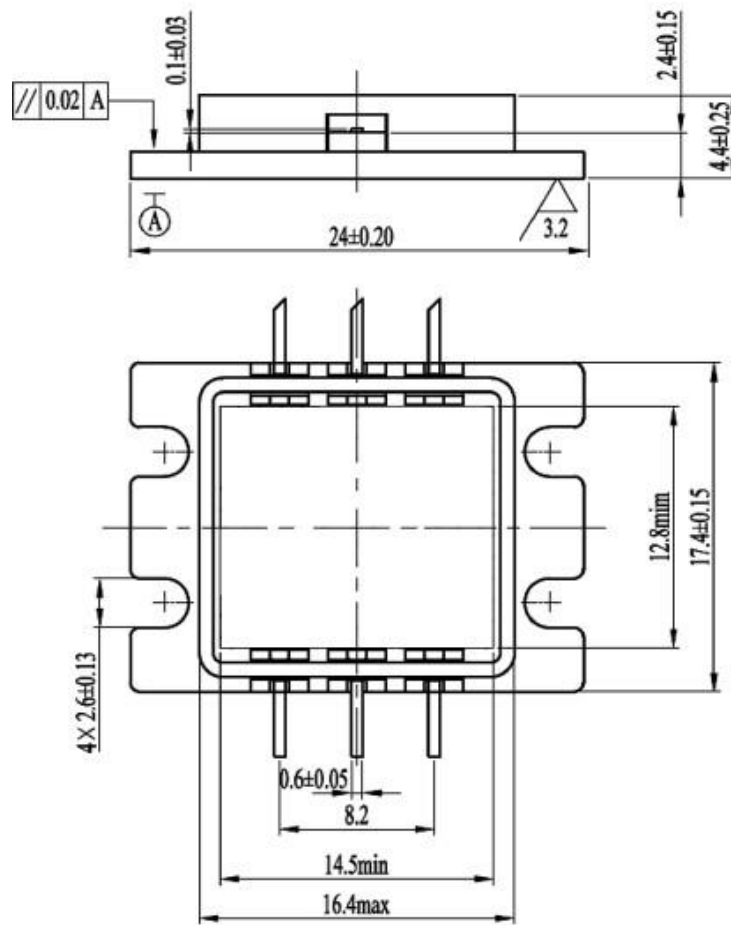
## Application Circuit:



## ESD Level:

ESD	Class III	2000V
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## 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.