



## ACMI027031-P40

S-band matched GaAs power amplifier module

### Features:

Frequency: 2.7~3.1GHz

Saturated Output Power:  $P_{sat} \geq 40\text{dBm}$

PowerGain:  $\text{Gain} \geq 24\text{dB}$

Efficiency:  $\eta = 45\%$ (type)

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

### Description:

ACMI027031-P40 is an internal matching GaAs power amplifier module, which adopts advanced co-planar internal matching MCM and thin film circuit technology. The typical working frequency range is 2.7~3.1GHz. 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

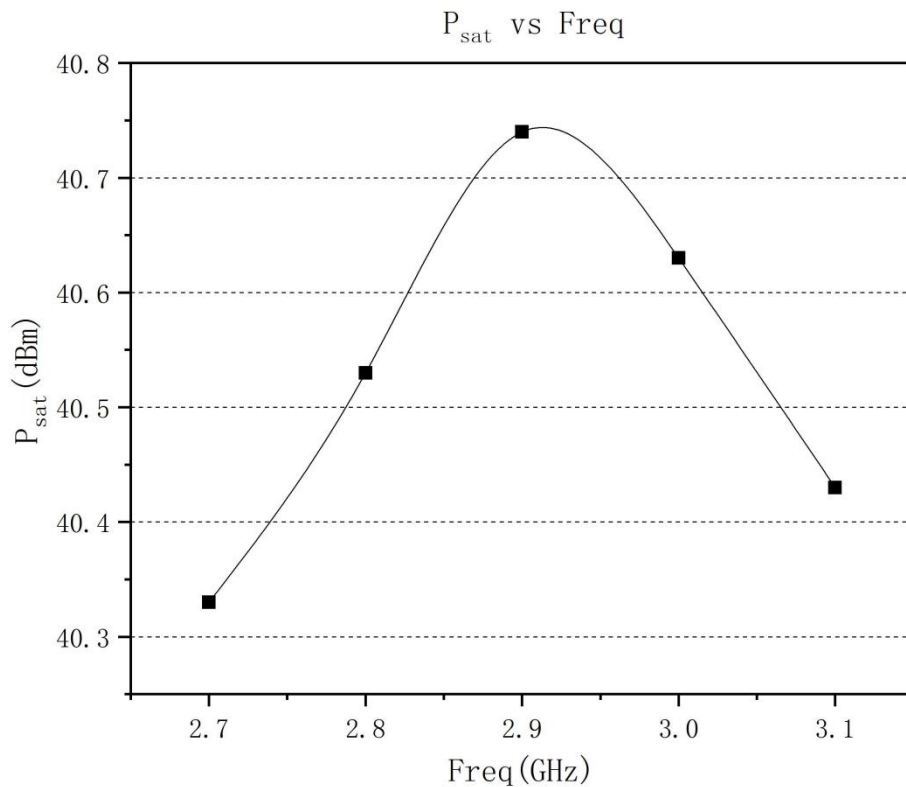


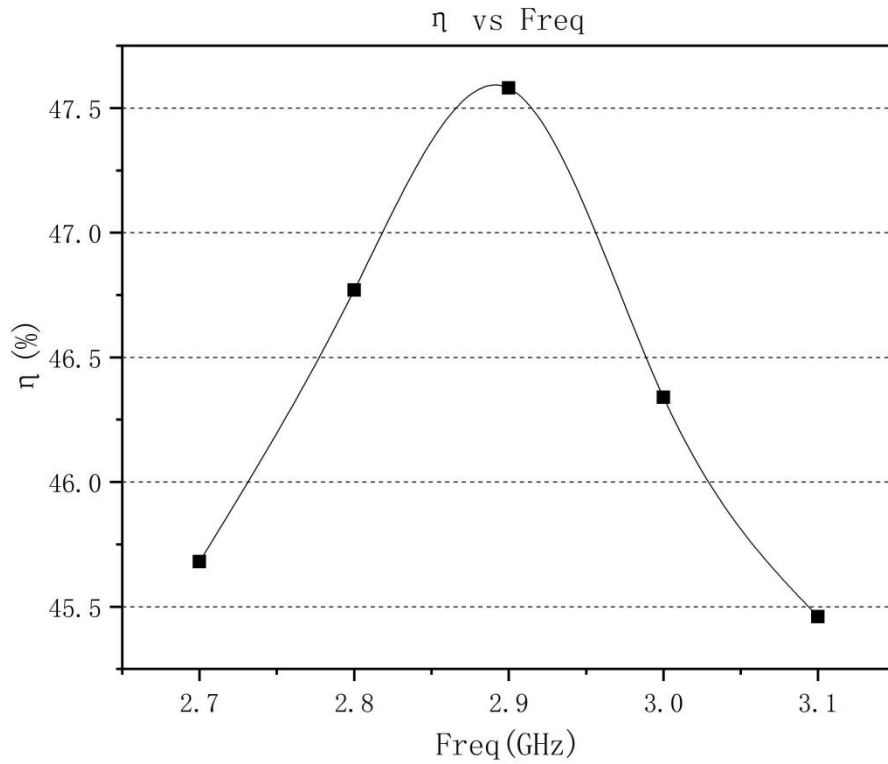
# Internal Matching GaAs Power Amplifier Module

## Electrical Characteristics:

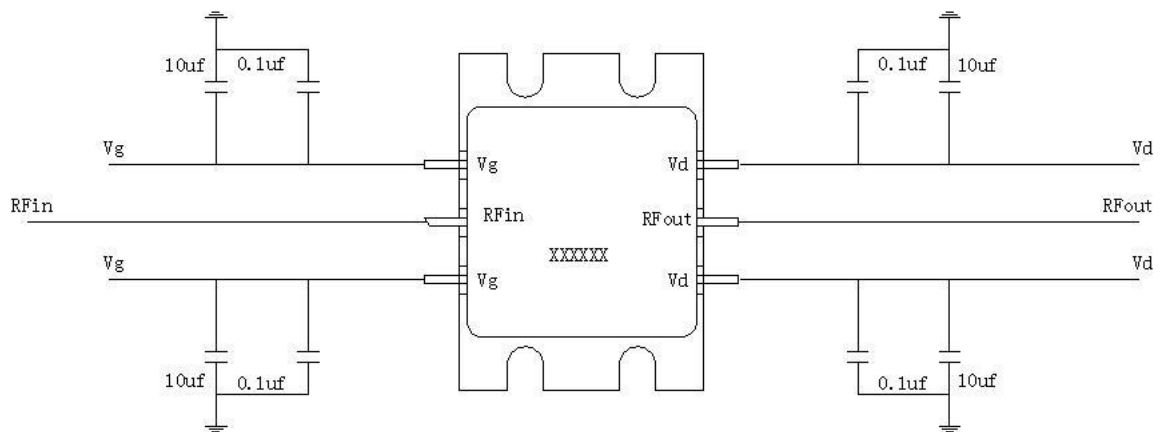
	Symbol	Test condition	Value			Unit
			Min	Typ	Max	
Drain Current	$I_{dsr}$	$V_{ds}=10V$ CW. $P_{in}: 16dBm$ $Freq: 2.7\sim 3.1GHz$	-	2.2	-	A
Saturated Output Power	$P_{sat}$		40	-	-	dBm
Gain	$G_p$		24	-	-	dB
Efficiency	$\eta$		-	45	-	%
Gain Flatness	$\Delta G$		-0.8	-	+0.8	dB

## Typical Curve:





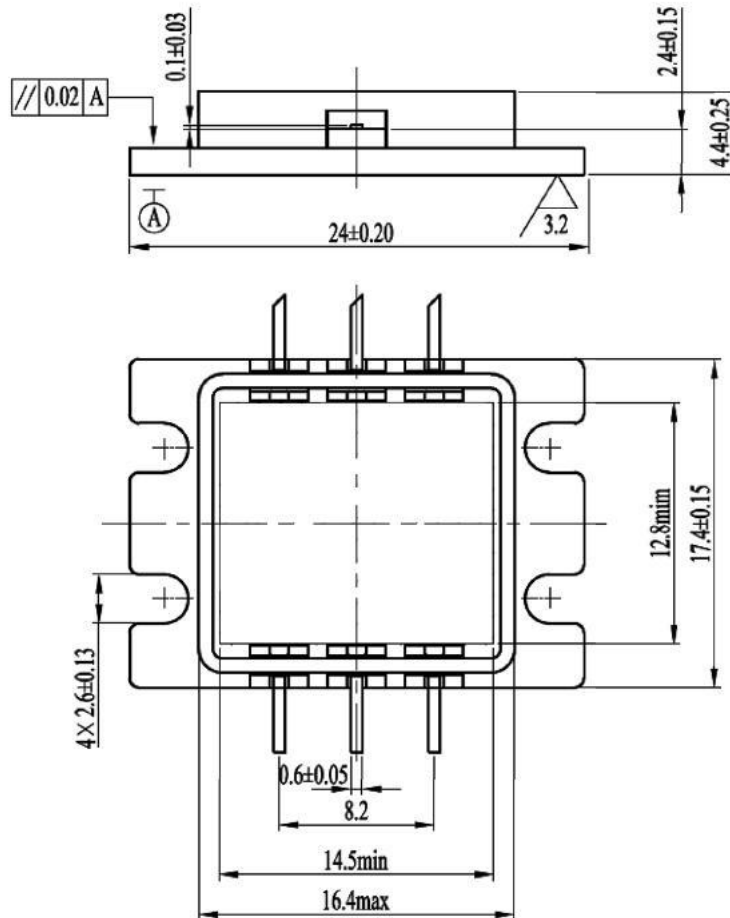
## Application Circuit:



## 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.