

Key Features

Frequency: 2.7-2.9GHz

Power Added Efficiency: 60% (typ)

Typical Gain: 12dB (typ)

Offset: 50V

Typical Output: ≥ 57 dBm

Packaging Mode: Cermet

Introduction

ER-GN2729-P57 is 2.7-2.9GHz high power and efficiency GaN IMFET, using GaN HEMT technology. It works with dual power supply, $V_{ds}=50V$, and can provide 57dBm output power in 2.7-2.9GHz, typical power gain is 12dB, power added efficiency is 60%.

Maximum Ratings ($T_A=25^{\circ}C$)

Symbol	Parameter	Value	Mark
Vd	Drain Voltage	60V	
Vg	Gate Voltage	-5V	
Tch	Channel Temperature	150°C	[1]
Tstg	Storage Temperature	-65 ~ 150°C	

[1] Higher than any values above may cause permanent damage.

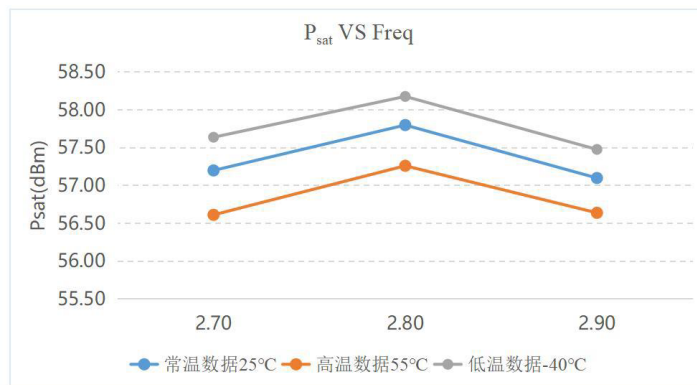
Specifications ($T_A=25^{\circ}C$)

Symbol	Parameter	Values			Unit
		Min	Typ	Max	
Pout	Output Power	57		-	dBm
Id	Drain current		16.7		A
Gp	Power Gain	12			dB
ΔG	Gain Flatness	-0.8		+0.8	dB
PAE	Power Added Efficiency		60	-	%

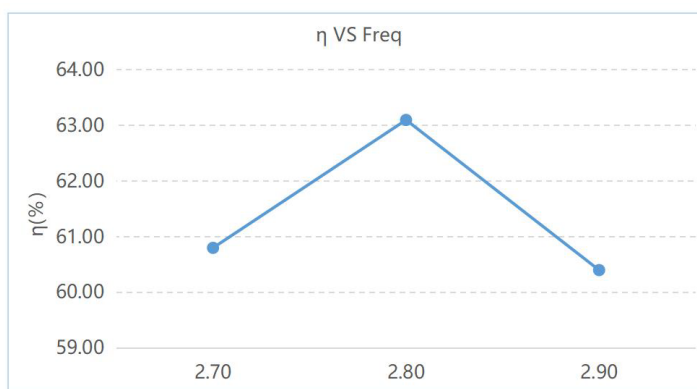
Test condition: $V_d=50V$, 10% duty, 1ms, $P_{in}=45dBm$; F: 2.7-2.9GHz.

Typical Performances

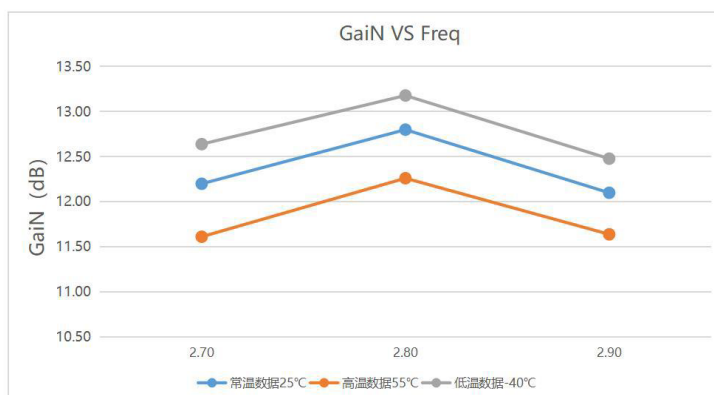
P_{out}



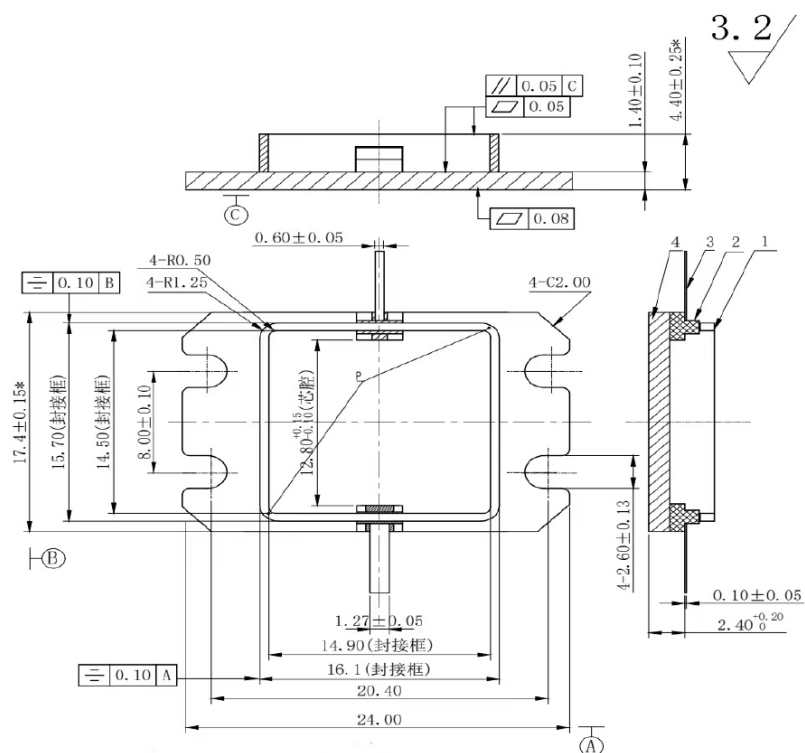
PAE



Gain



Dimension (Unit: mm)



Recommended Circuit

