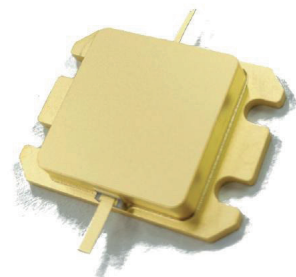


FEATURES

- Frequency Range: 2.7 – 3.5 GHz
- Psat Output Power: ≥56dBm
- Power Gain: ≥ 13 dB
- work efficiency η : ≥ 50%
- Zin/Zout=50Ω



Description

The ERI2735-P56 is a gallium nitride internal - matching power transistor. It adopts advanced in - plane matching synthesis technology and mature thin - film hybrid integrated process. The typical working frequency band of the product is 2.7 – 3.5 GHZ, and it has characteristics such as high power, high efficiency and environmental adaptability such as temperature, and can be widely used in various radio - frequency/microwave systems.

ABSOLUTE MAXIMUM RATINGS (Ta= 25°C)

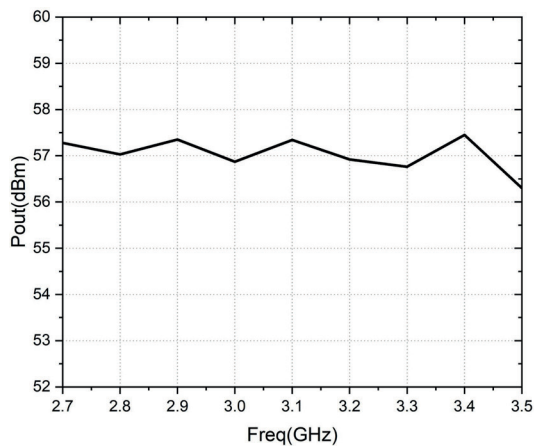
CHARACTERISTICS	SYMBOL	VALUE	UNIT
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	-5	V
Channel Temperature	T_{ch}	200	°C
Storage Temperature	T_{stg}	-65~+175	°C

RF PERFORMANCE SPECIFICATIONS (Ta= 25°C)

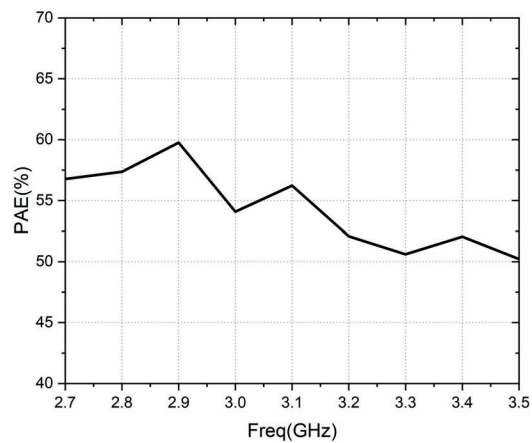
CHARACTERISTICS	TEST CONDITIONS	VALUE		
		Min	Typ	Max
Psat Output Power	Freq: 2.7~3.5GHZ VGS=-2~-4V VDS=+44V Pulse width 300 μs, duty cycle 10%	56dBm	56.5dBm	-
Power Gain		13dB	13.5dB	-
work efficiency		50%	55%	-
Gain Flatness		-	-	1.5 dB
Pinch- Off Voltage	VDS=6V, IDS≤80mA	-4V	-	-2V
Gate- Source Leakage Current	VDS=0V, VGS=-10V	-	-	10mA

TYPICAL CHARACTERISTICS

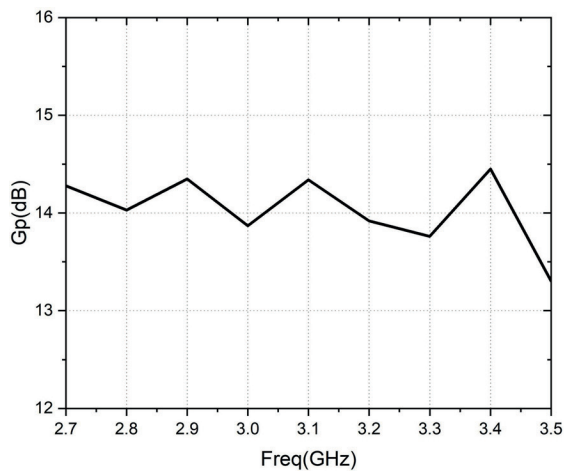
Saturated Output Power vs. Frequency
(Pin=43dBm)



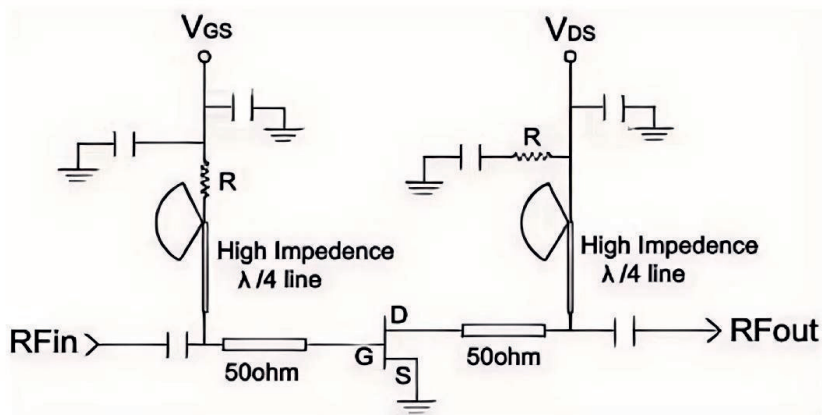
PAE vs. Frequency
(Pin=43dBm)



Power Gain vs. Frequency
(Pin=43dBm)



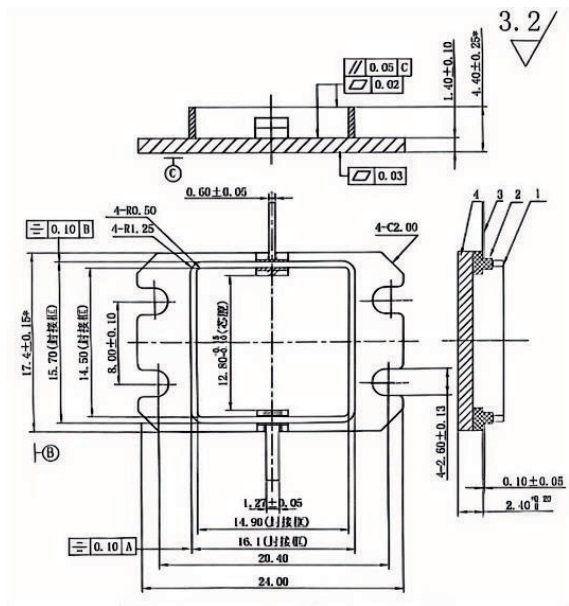
Recommended application circuit:



Antistatic level

ESD	Class III	2000V
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Package Outline (Unit: mm)



Application Precautions:

- Pay attention to dryness during transportation and storage.
- Pay attention to anti - static during chip use and assembly, and wear grounded anti - static bracelets.
- When applying power, apply gate voltage first and then leakage voltage.