Performance

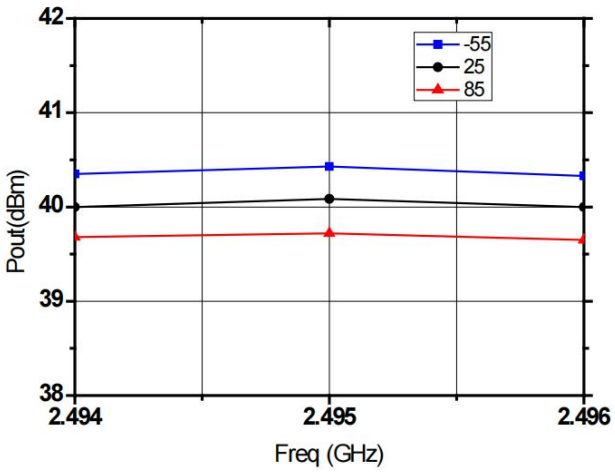
- Technology: 0.35um Power GaN HEMT
- Frequency: 2.494~2.496GHz
- Typical Pout : 40dBm(CW)
- Typical Gain: 12dB
- Typical PAE: 55%
- Bias: 28V/-4~-2V
- Package: Metal Ceramic

Electrical Specifications (T_A=25℃,V_d=28V,Id≈0.6A,Pin=28dBm,CW,F: 2.494~2.496GHz)

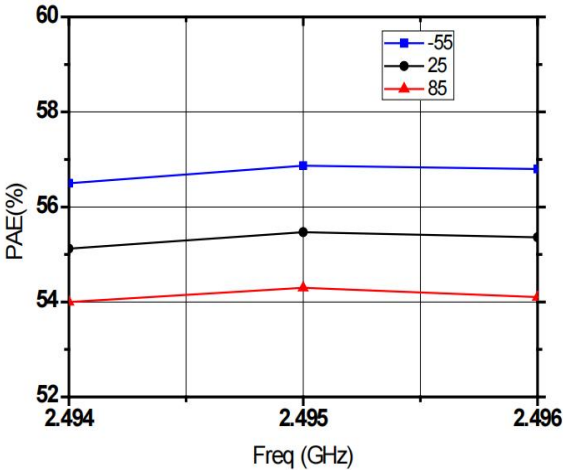
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	40	-	dBm
Gp	Power Gain	-	12	-	dB
ηadd	Power Added Efficiency	-	55	-	%
Rth	Thermal Resistance	-	-	10	℃/W

Test Curves

Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.

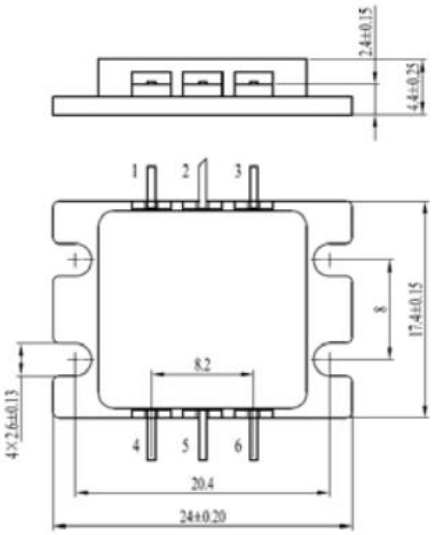


Absolute Max Ratings (T_A=25℃)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	36V	
Vg	Grid Voltage	-5V	
Pd	DC Dissipation	40W	25℃
Tch	Channel Temperature	225℃	【1】
Tm	Mounting Temperature	300℃	1 min, N_2 Protection
Tstg	Storage Temperature	-55~150℃	

【1】Exceeding any one or combination of these limits may cause permanent damage.

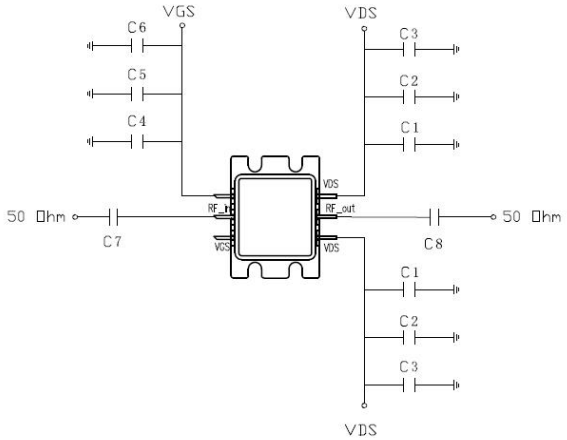
Outline Drawing



Dimension Symbol

No	Function	No	Function
1、3	Vg	4、6	Vd
2	RFin	5	RFout

Application Circuit



Parameter	Symbol	Value	Unit
Filter capacitor	C1,C2,C4, C5,C6	1000	pF
Filter capacitor	C3,C7	100	pF
DC isolation capacitance	C8,C9	20	pF
Stabilizing resistance	R1	15	Ω
Resistance	R2	50	Ω
Microstrip line	TL1,TL2	λ/4	-

Note:

(1) The typical packaging form is C164-2 shell packaging;

(2) Connect the circuit according to the diagram, pay attention to anti-static, and ensure good grounding and heat dissipation when using power devices;

(3) In order to ensure the good performance of the power module, the capacity value of power filter and energy storage capacitor shall be reasonably selected according to the modulation mode during pulse operation.