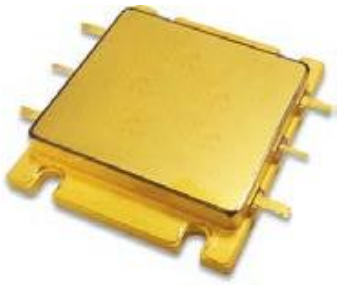
Performance



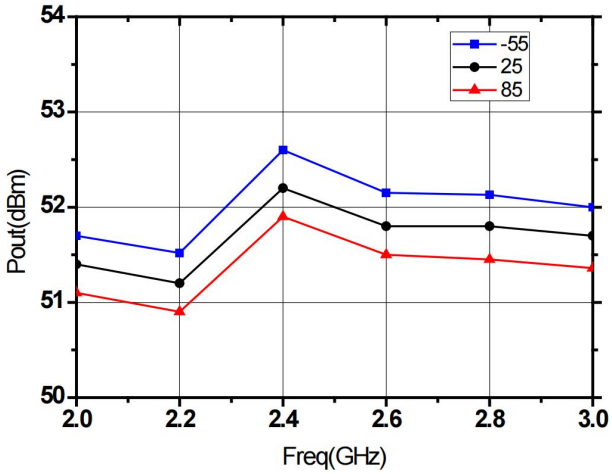
- Technology: 0.35um Power GaN HEMT
- Frequency: 2.0~3.0GHz
- Typical Pout : 50dBm(CW)
- Typical Gain: 13dB
- Typical PAE: 45%
- Bias: 32V/-5V@2.5A
- Package: Metal Ceramic

Electrical Specifications (T_A=25℃,V_d=32V,Vg=-5V,Id≈4A,F: 2.0-3.0GHz)

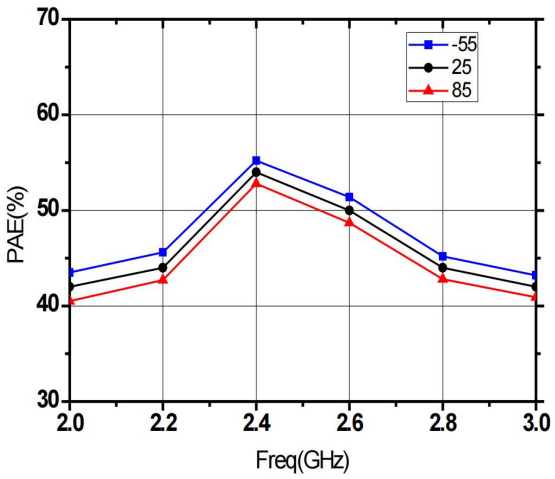
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	50	-	dBm
Gp	Power Gain	-	13	-	dB
ηadd	Power Added Efficiency	40	45	-	%
△Gp	Gain Flatness	-0.8	-	+0.8	dB
Rth	Thermal Resistance	-	-	1.2	℃/W

Test Curves

Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.

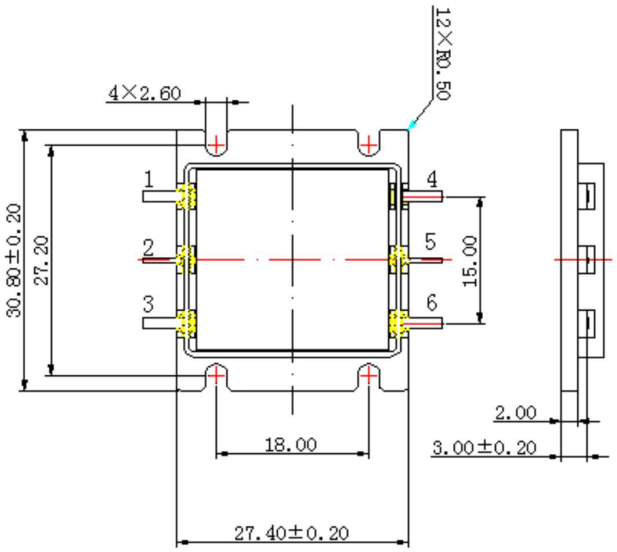


Absolute Max Ratings (T_A=25℃)

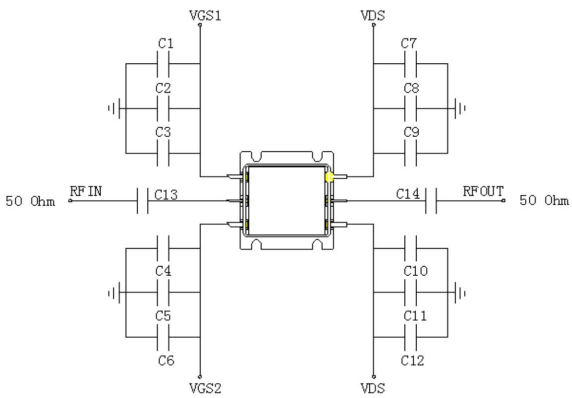
Symbol	Parameter	Value	Remark
Vd	Drain Voltage	36V	
Vg	Grid Voltage	-5V	
Tch	Channel Temperature	175℃	【1】
Tm	Mounting Temperature	300℃	1 min, N_2 Protection
Tstg	Storage Temperature	-55~175℃	

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

Outline Drawing



Application Circuit



Symbol	Value
C1/C4	100 pF
C2/C5	1000 pF
C3/C6	10 uF
C7/C10	100 pF
C8/C11	1000 pF
C9/C12	47 uF
C13	20 pF
C14	20 pF

Note:

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

(2) 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

(3) VGS=VG1=VG2;

(4) Power module power-up sequence: VGS, VDS;

(5) Power module power-off sequence: VDS, VGS