Performance

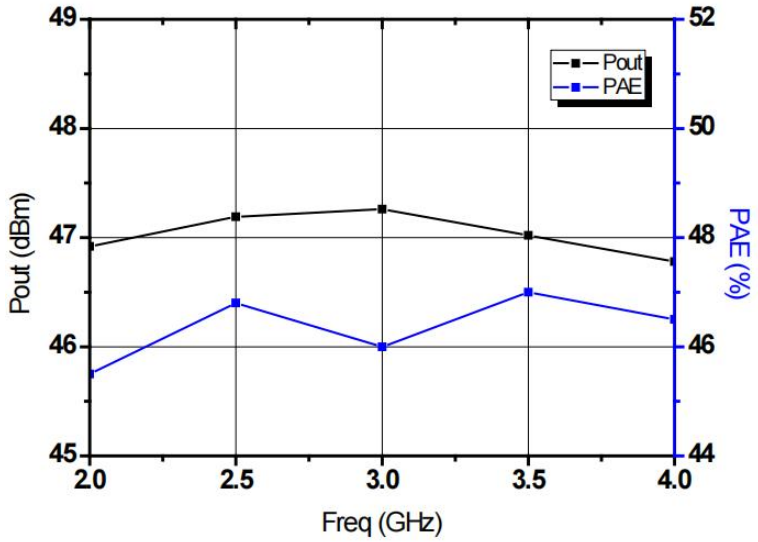
- Technology: 0.25um Power HEMT
- Frequency: 2.0~4.0GHz
- Typical Pout : 50W(CW)
- Typical Gain: 10dB
- Typical PAE: 45%
- Bias: 28V/-2.5V
- Package: Metal Ceramic

Electrical Specifications（TA=25℃,Vd=28V,Vg=-2.5V,F: 2.0~4.0GHz）

Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	50	-	W
Gp	Power Gain	-	10	-	dB
ηadd	Power Added Efficiency	-	45	-	%
△Gp	Gain Flatness	-0.5	-	+0.5	dB

Test Curves

Pout、PAE&Freq.

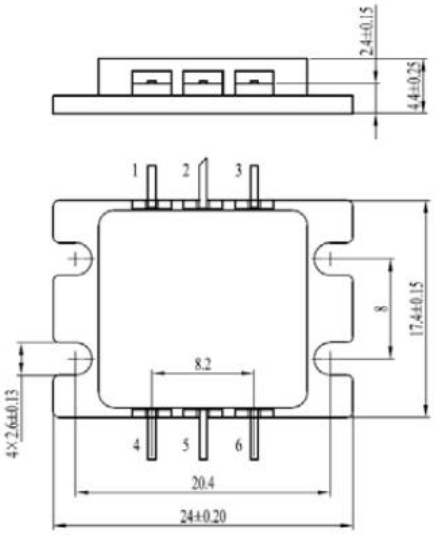


Absolute Max Ratings (TA=25℃)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	40V	
Vg	Grid Voltage	-5V	
Pd	DC Dissipation	125W	25℃
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.

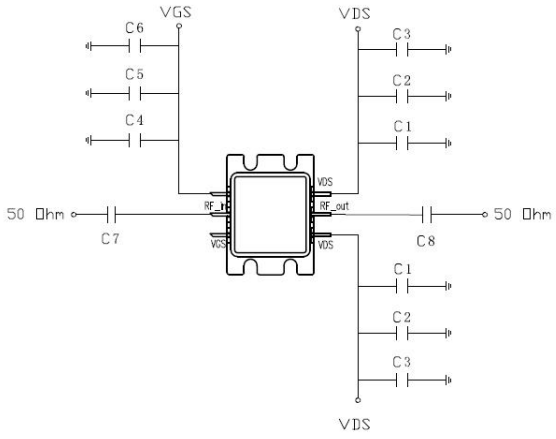
Outline Drawing



Pad Definition

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

Application Circuit



Symbol	Value
C1	100pF
C2	1000pF
C3	47uF
C4	100pF
C5	1000pF
C6	10uF
C7	20pF
C8	20pF

Note:

(1) The typical packaging form is C164-2 tube 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 good performance of the power module, the capacitance values of the power filter and energy storage capacitor should be reasonably selected according to the modulation method during pulse operation;

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

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