

Performance

- Technology: 0.25um Power GaN HEMT
- Frequency: 0.38~1.45GHz
- Typical Pout : 52dBm(CW)
- Typical Gain: 12dB
- Typical PAE: $\geq 50\%$
- Bias: 28V/-2.0~-2.7V@1A
- Package: Carrier, non packaged

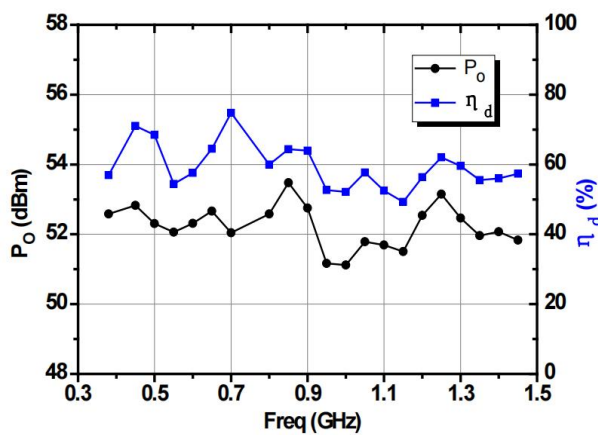


Electrical Specifications ($T_A=25^\circ\text{C}$, $V_d=28\text{V}$, $I_{dQ}=1\text{A}$, $F: 0.38\sim 1.45\text{GHz}$, $P_{in}=40\text{dBm}$)

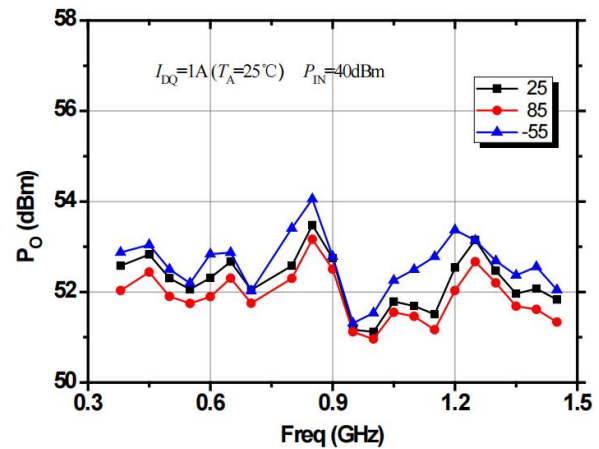
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	52	-	dBm
Gp	Power Gain	-	12	-	dB
η_{add}	Power Added Efficiency	50	-	-	%
ΔGp	Gain Flatness	-	-	± 1.2	dB
Rth	Thermal Resistance	-	0.6	-	$^\circ\text{C/W}$

Test Curves

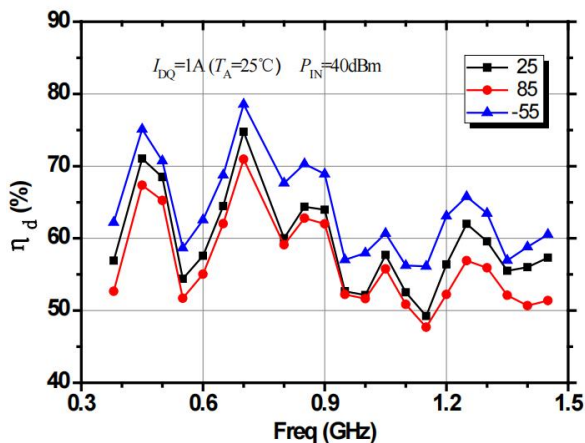
Pout, η_{add} &Freq.



Pout&Freq. @ Different Temp.



η_{add} &Freq. @ Different Temp.

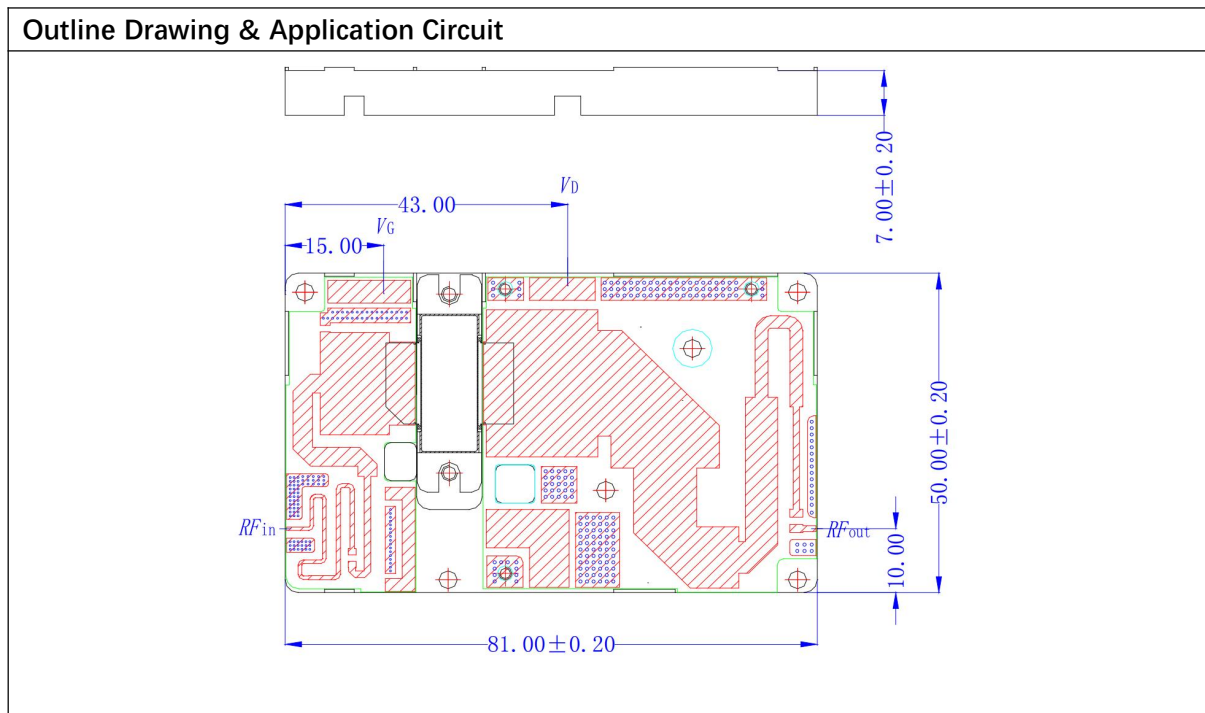


Absolute Max Ratings ($T_A=25^\circ\text{C}$)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	40V	
Vg	Grid Voltage	-5V	
Pin	Input Power	300W	25°C
Pd	DC Dissipation	225°C	【1】
Tch	Channel Temperature	300°C	1 min, N2 Protection
Tm	Mounting Temperature	-55~175°C	

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

Outline Drawing & Application Circuit



Note:

- (1) This product is an internal matching power amplifier module, and the input and output impedance values are both 50 ohms;
- (2) Please strictly follow the order of adding negative electricity first and then positive electricity in the power-on sequence. When de-energizing, first reduce the drain voltage and then reduce the gate voltage;
- (3) This product is a high-power device. It is necessary to pay attention to heat dissipation during use. The higher the case temperature, the shorter the service life. It is advisable to use the temperature not higher than 85 degrees;
- (4) This product is an electrostatic sensitive device, you need to pay attention to electrostatic protection during storage and use, and you need to be well grounded when using it;
- (5) The input standing wave is relatively high, and radio frequency isolation measures are required at the input end.