

Performance

- Technology: 0.25um Power GaN HEMT
- Frequency: 2.0~4.0GHz
- Typical Pout : $\geq 49\text{dBm(CW)}$
- Typical Gain: $\geq 7\text{dB}$
- Typical PAE: $\geq 45\%$
- Bias: 28V@1A
- Package: Metal Ceramic

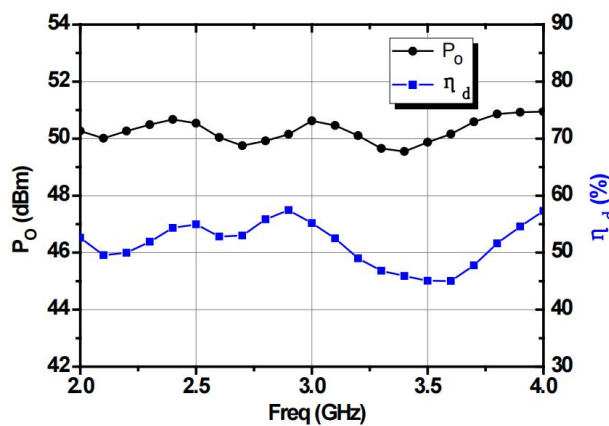


Electrical Specifications (TA=25°C, Vd=28V, Idq=1A, F: 2.0~4.0GHz, Pin=42dBm)

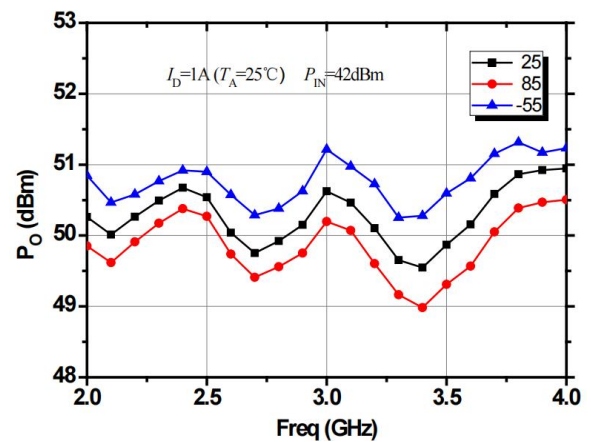
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	49	-	-	dBm
Gp	Power Gain	7	-	-	dB
η_{add}	Power Added Efficiency	45	-	-	%
ΔG_p	Gain Flatness	-	-	± 0.7	dB
Rth	Thermal Resistance	-	0.95	-	°C/W

Test Curves

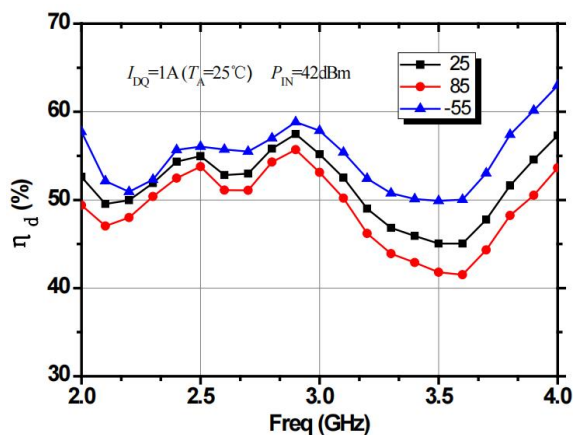
Pout, η_{add} & Freq.



Pout & Freq. @ Different Temp.



η_{add} & Freq. @ Different Temp.

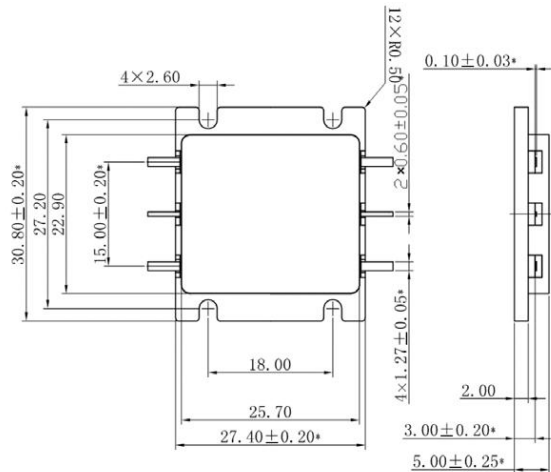


Absolute Max Ratings (T_A=25°C)

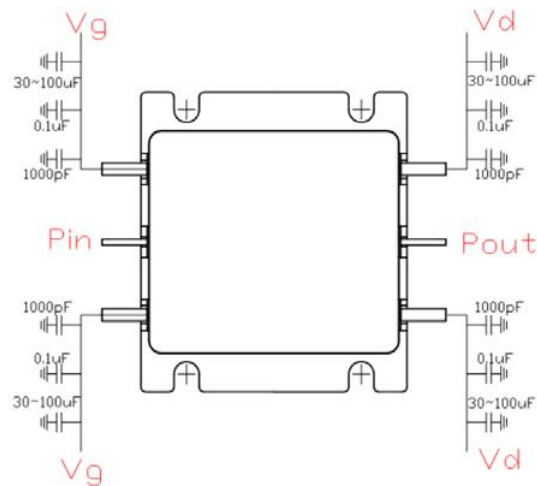
Symbol	Parameter	Value	Remark
Vd	Drain Voltage	36V	
Vg	Grid Voltage	-5V	
Pd	DC Dissipation	250W	25°C
Tch	Channel Temperature	225°C	【1】
Tm	Mounting Temperature	300°C	1 min, N2 Protection
Tstg	Storage Temperature	-55~175°C	

[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 tube, with input and output impedance values of 50 ohms;
- (2) Please strictly follow the sequence of applying negative power first and then positive power. When removing power, first decrease the leakage voltage and then decrease the gate voltage;
- (3) This product is a high-power device, and attention should be paid to heat dissipation during use. The higher the shell temperature, the shorter the service life, and the appropriate use temperature should not be higher than 85 degrees Celsius;
- (4) This product is an electrostatic sensitive device, which requires attention to electrostatic protection during storage and use, and requires good grounding during use;
- (5) The input standing wave ratio is high, and the input terminal needs to adopt radio frequency isolation measures.