

Performance

- Technology: 0.25um Power GaN HEMT
- Frequency: 2.0~6.2GHz
- Typical Pout : $\geq 49\text{dBm(CW)}$
- Typical Gain: $\geq 7\text{dB}$
- Typical PAE: $\geq 40\%$
- Bias: 28V@1.0A
- Package: Metal Ceramic

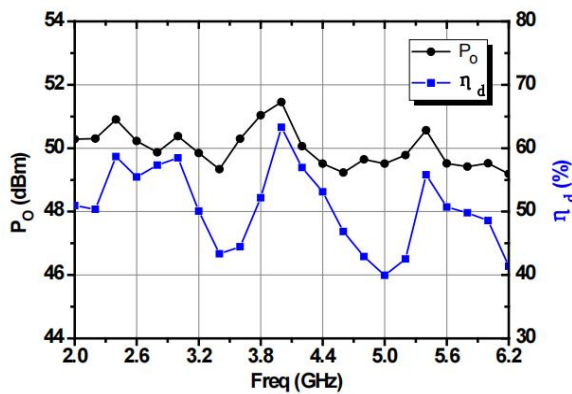


Electrical Specifications ($T_A=25^\circ\text{C}$, $V_d=28\text{V}$, $I_{dQ}=1\text{A}$, $F: 2\sim 6.2\text{GHz}$, $P_{in}=42\text{dBm}$)

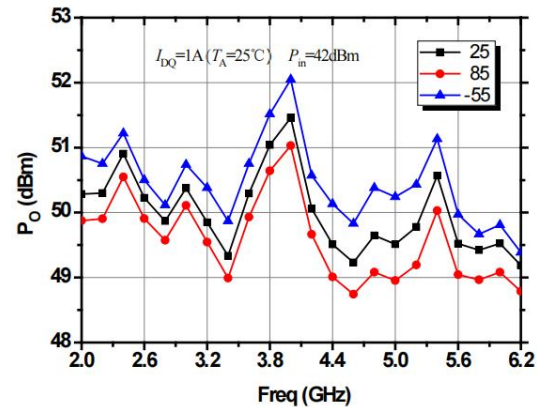
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	49	-	-	dBm
Gp	Power Gain	7	-	-	dB
η_{add}	Power Added Efficiency	40	-	-	%
ΔGp	Gain Flatness	-1.0	-	+1.0	dB
Rth	Thermal Resistance	-	-	0.95	$^\circ\text{C/W}$

Test Curves

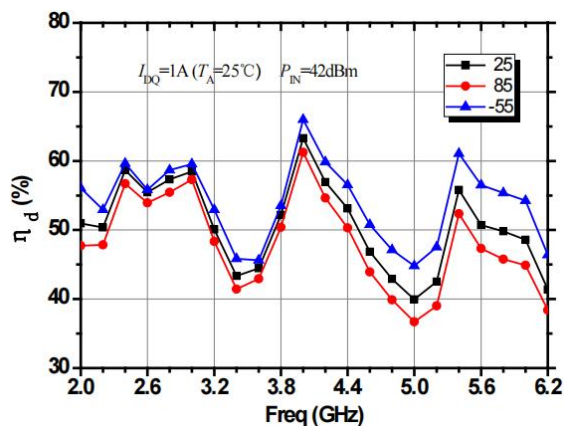
Pout、 η_{add} &Freq.



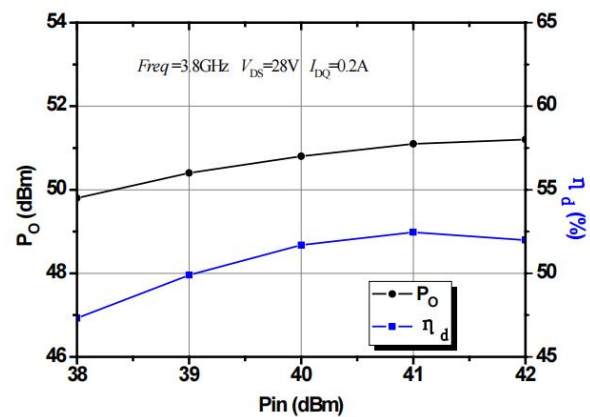
Pout&Freq. @ Different Temp.



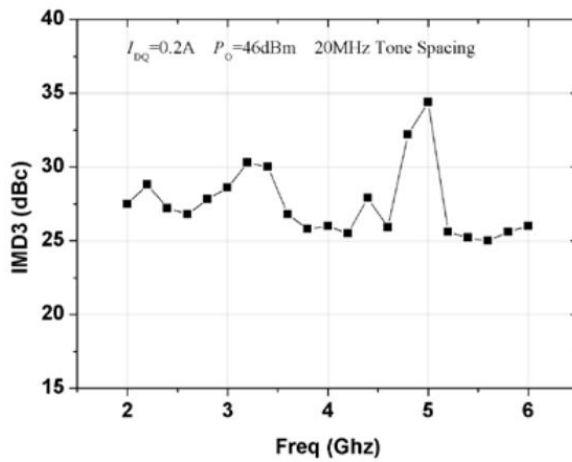
η_{add} &Freq. @ Different Temp.



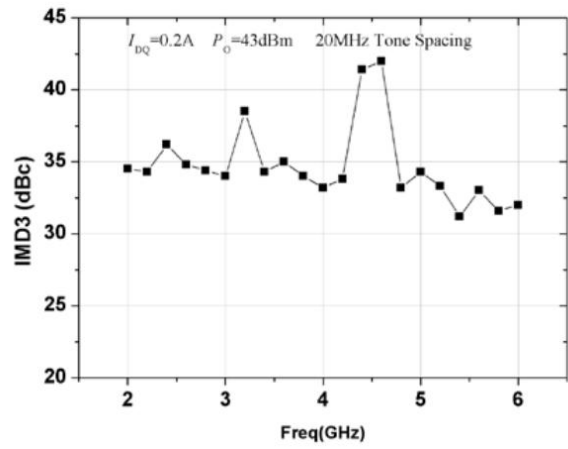
Po&Freq.



IMD3 40W



IMD3 20W

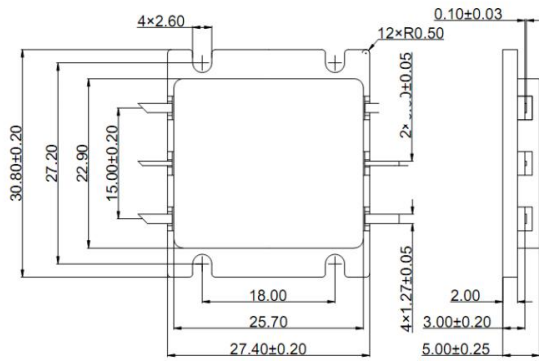


Absolute Max Ratings (TA=25°C)

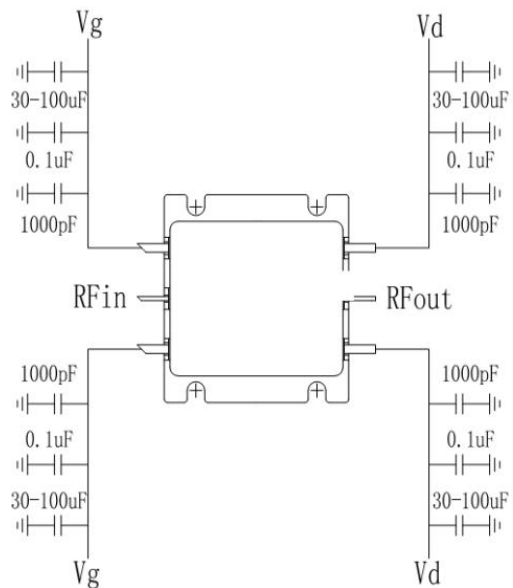
Symbol	Parameter	Value	Remark
Vd	Drain Voltage	40V	
Vg	Grid Voltage	-5V	
Pd	DC Power	225W	25°C
Tch	Channel Temperature	225°C	【1】
Tm	Mounting Temperature	300°C	1 min, N2 Protection
Tstg	Storage Temperature	-55~175°C	

【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) The power-on sequence shall be in strict accordance with the sequence of applying negative power first and then positive power. When power-off, the leakage voltage shall be reduced first and then the grid voltage shall be reduced;
- (3) This product is a high-power device. Pay attention to heat dissipation during use. The higher the shell temperature is, the shorter the service life is. The service temperature should not be higher than 85 °C;
- (4) This product is an electrostatic sensitive device. It needs to pay attention to electrostatic protection during storage and use, and it needs to be grounded well during use;
- (5) The input standing wave ratio is high, and the input end needs to adopt radio frequency isolation measures.