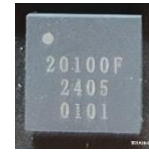


VMCG-100M/5000M-SM0606-P

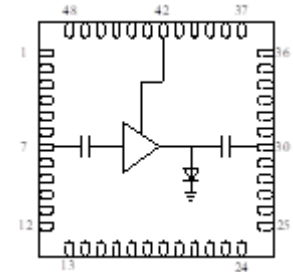
FEATURES

- ◆ Input Frequency: 100MHz
- ◆ Input power: 7 ± 2 dBm
- ◆ Output Frequency: 100MHz~5000MHz
- ◆ Size: 6.0mm×6.0mm×1.7mm



TYPICAL APPLICATIONS

- ◆ L, S, C, X, Ku band Radar
- ◆ Military Radio
- ◆ General Amplification



ELECTRICAL SPECIFICATIONS

(TA=25°C, VCC=5V, Input frequency 100MHz, Input power 7dBm)

Parameter		Min.	Typ.	Max.	Unit
Output Frequency		100	-	5000	MHz
Output Power	@0.1GHz~1GHz	-5	-	-	dBm
	@1.1GHz~2GHz	-10	-	-	dBm
Phase Noise Degradation @1GHz	@1kHz	-	3	5	dB
Phase Noise	@1kHz	-	-160	-	dBc/Hz
Spurious Suppression		-	-	-70	dBc
Current		-	75	85	mA

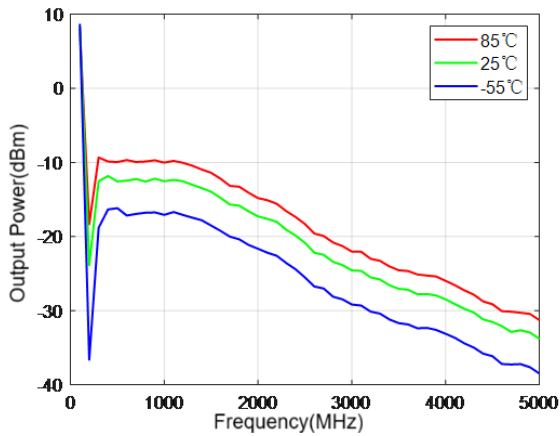
ABSOLUTE MAXIMUN RATINGS

Parameter	Function
VCC	+5.5V
Input power	+13dBm
Reflow Soldering Peak Temperature	255°C/30Sec

TYPICAL PERFORMANCE CURVES

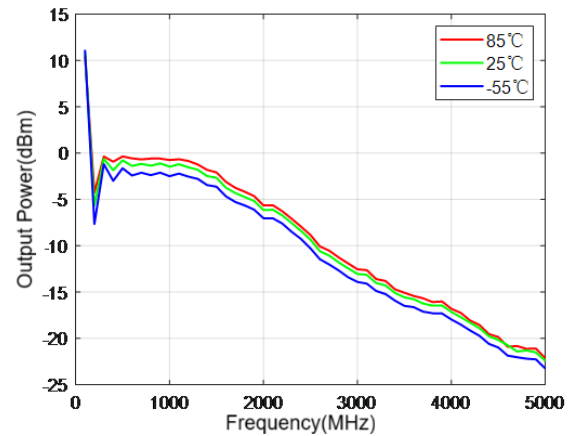
Output power

(VCC=4.5V, Input power 0dBm)



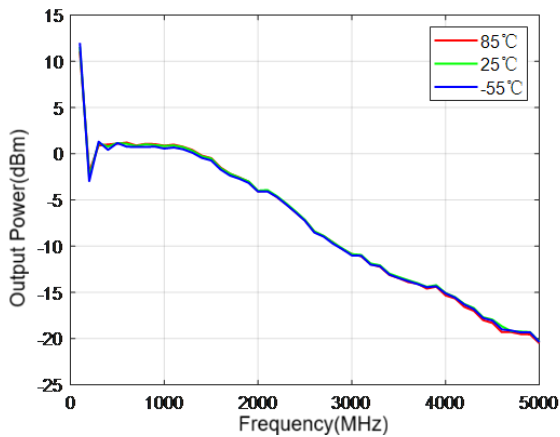
Output power

(VCC=4.5V, Input power 5dBm)



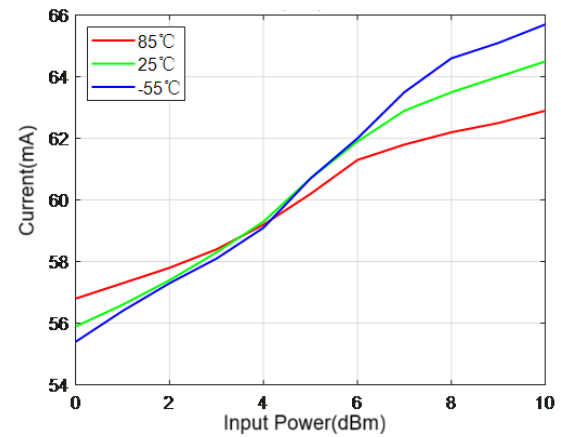
Output Power

(VCC=4.5V, Input power 10dBm)



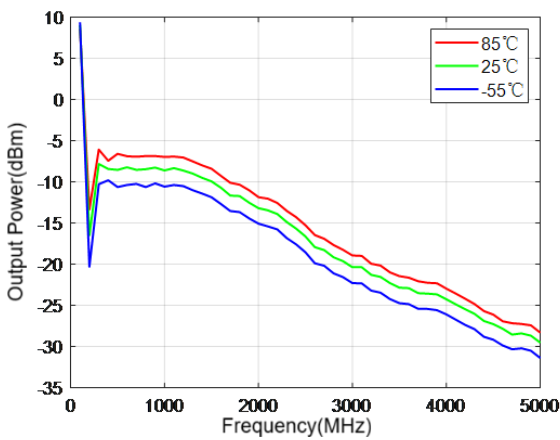
Current

(VCC=4.5V)



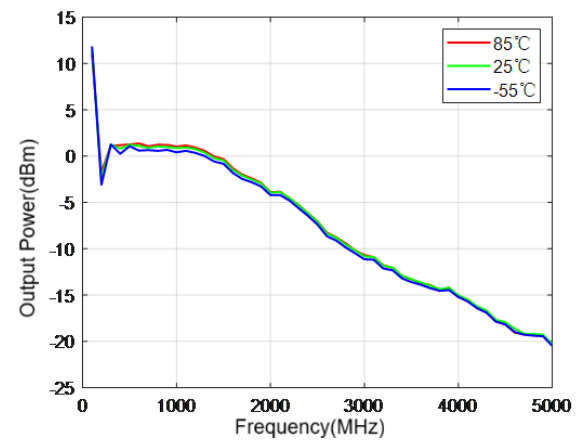
Output Power

(VCC=5V, Input power 0dBm)

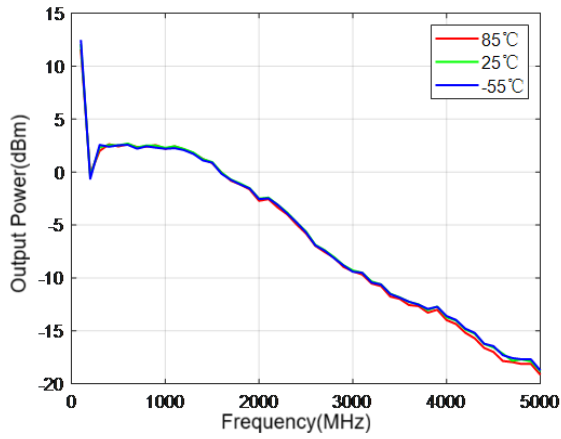


Output Power

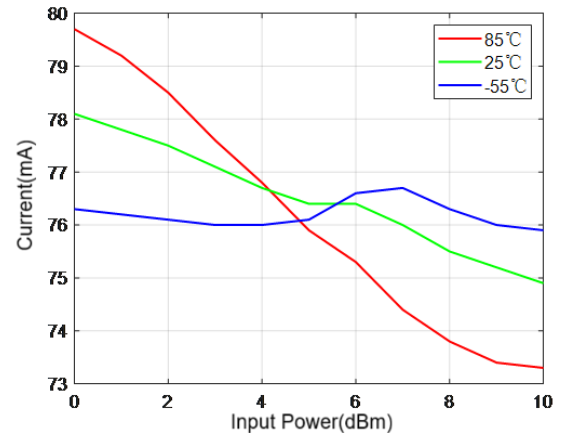
(VCC=5V, Input power 5dBm)



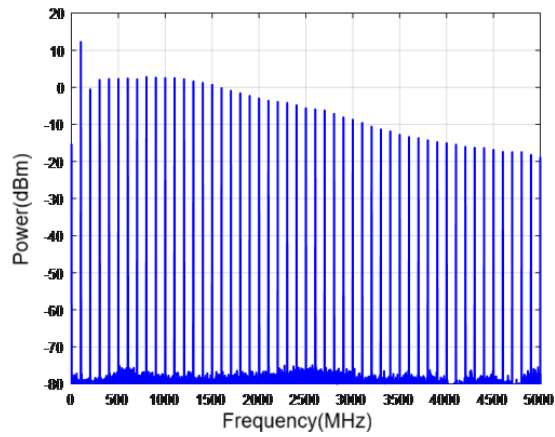
Output Power
(VCC=5V, Input power 10dBm)



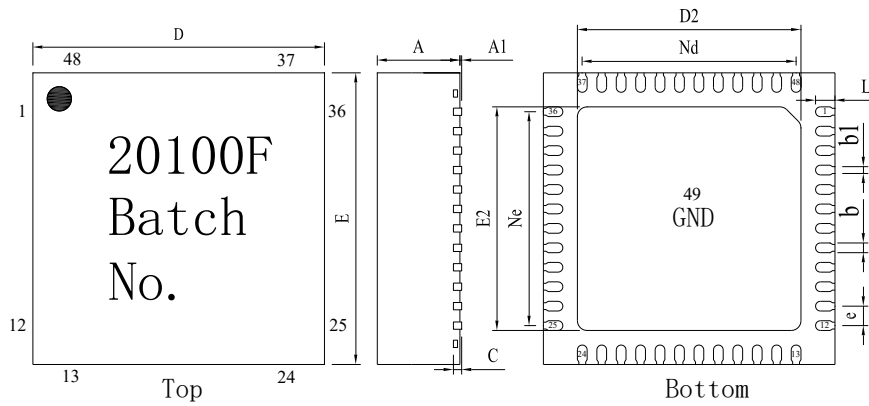
Current
(VCC=5V)



Frequency Spectrum
(VCC=5V, Input power 8dBm, TA=25°C)



OUTLINE DRAWING

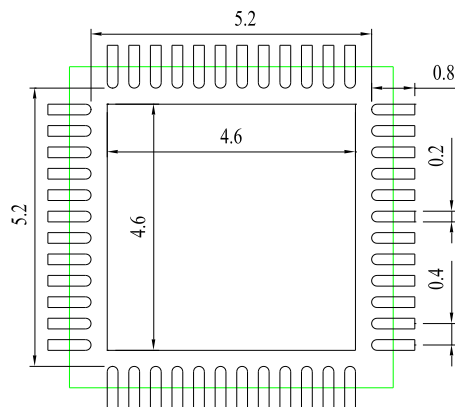


Symbol	Dimensions(mm)			Symbol	Dimensions(mm)		
	Min	Typ	Max		Min	Typ	Max
A	0.65	1.70	1.75	b	0.15	0.20	0.25
A1	-	0.02	0.05	b1	-	0.14	-
c	-	0.203	-	e	-	0.40	-
Ne	-	4.40	-	Nd	-	4.40	-
D	5.90	6.00	6.10	E	5.90	6.00	6.10
D2	4.50	4.60	4.70	E2	4.50	4.60	4.70
L	0.35	0.40	0.45				

PIN FUNCTION

Pin No.	Function	Symbol
7	Input	IN
30	Output	OUT
42	Power	VCC
6、8、29、31、49	Ground	GND
O.W.	NC	NC

RECOMMENDED FOOTPRINT



APPLICATION NOTES

