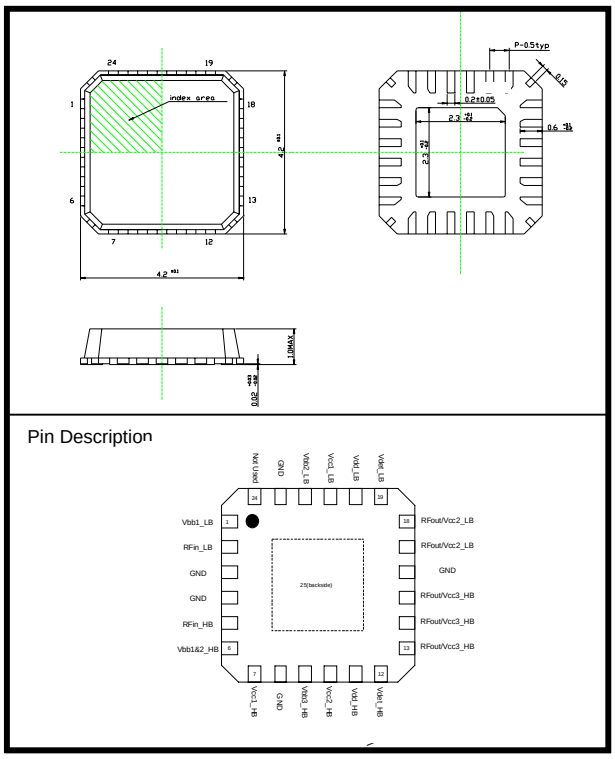
IRM046U

2.4 / 5GHz ISM Power Amplifier MMIC for W-LAN

- Small Package (4.2×4.2×0.9mm)
- High Gain : 30dB for 5GHz & 2.4GHz
- 18dBm Output Power for 802.11a
- 18dBm Output Power for 802.11g
- Very Low Current Consumption



●Absolute Maximum Ratings（Ta=25℃）

Parameters	Symbol	Rating	Unit
DC Supply Voltage	Vcc	6	V
Input RF Power	Pin	5	dBm
Peak Supply Current	Icc	300	mA
Total DC Power Dissipation	Pt	1	W
Storage Temperature	Tstg	-30 - +120	℃
Operating Temperature	Tc_opr	-25 - +85	℃

●Electrical Characteristics（Ta=25℃）

			IRM046U						
			IRM047U			IRM048U			
Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Min.	Typ.	Max.	Unit
Supply Voltage	Vcc		3.0	3.3	3.6	3.0	3.3	3.6	V
Frequency	Freq		2400		2500	4900		5900	MHz
Operating Case Temperature	Tc(opr)		-25	25	+85	-25	25	+85	℃
Ileak Current	Ileak	Vcc=6V, Vbb=0V, No RF output		0.02	0.1		0.02	0.1	μA
Idle Current	Iidle	Vcc=3.3V, Vbb=2.8V, No RF output		55			75		mA
Output Power Gain	Gain	Vcc=3.3 V,Vbb =2.8 V, Pout=18 dBm For Freq. 2400 - 2500 <IEEE802.11g OFDM-64QAM Input for 2.4GHz> For Freq. 4900 – 5900 MHz <IEEE802.11a OFDM-64QAM Input for 5GHz>	27	30		27	30		dB
Collector Current	Icc			105			140		mA
Control Current	Ibb			5			6.5		mA
Adjacent Channel Power Rejection	ACPR1			- 37			- 37		dBc
Alt. Adjacent Channel Power Rejection	ACPR2			- 51			- 51		dBc
Error Vector Magnitude*	EVM			3			2		%

* Excluding non-linearity of SG.