



IPA014018N

135 - 175 MHz, 1 W POWER AMPLIFIER

REV B
July 2015

Key Features



- 135 ~ 175 MHz, 50 Ohm Impedance
- 30 dBm P_{1dB}
- 17 dB Gain
- 1.5:1 VSWR
- 43 dBm IP₃
- Precision Machined Housing
- Single DC Power Supply
- Meet MIL-STD-202g

Applications

- VHF
- PA Driver Amplifiers
- RF Bench Tests
- Fixed Wireless Applications



Absolute Maximum Ratings

Parameters	Units	Ratings
DC Power Supply Voltage	V	-0.5,16
RF Input CW Power	dBm	24
Storage Temperature	°C	-40 ~ +85
Operating Temperature	°C	-40 ~ +85

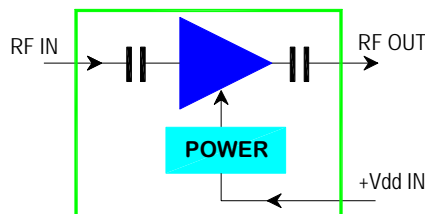
Additional heat sink is required for continuous operation!

Specifications

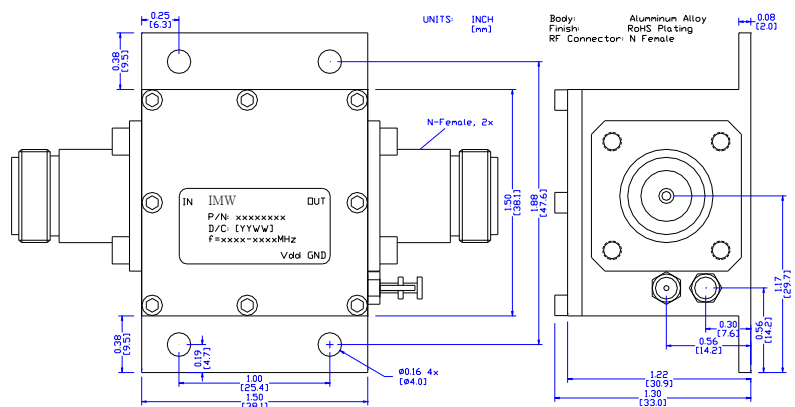
Summary of the key electrical specifications at 25°C

Index	Testing Item	Symbol	Test Constraints	Min	Nom	Max	Unit
1	Frequency Range	BW	50 Ohm Impedance	135		175	MHz
2	Gain	S ₂₁	135 – 175 MHz	16	17	18	dB
3	Gain Variation	ΔG	135 – 175 MHz		+/- 0.1		dB
4	VSWR	SWR _i	135 – 175 MHz all RF ports		1.5:1	2:1	Ratio
5	Reverse Isolation	S ₁₂	135 – 175 MHz		25		dB
6	Noise Figure	NF	135 – 175 MHz		2.5		dB
7	Output Power 1dB Compression Point	P _{1dB}	135 – 175 MHz	28	30		dBm
8	Output-Third-Order Interception Point	IP ₃	Two-Tone, P _{out} = 10 dBm each, 1 MHz Separation	40	43		dBm
9	Current Consumption	I _{dd}	V _{dd} = +12.0 V		220		mA
10	Power Supply Operating Voltage	V _{dd}		+12		+16	V
11	Operating Temperature	T _o		-40		+85	°C
12	Thermal Resistance	R _{th,c}	Junction to case			32	°C/W

Functional Block Diagram



Outline, IP-2 Housing



Ordering Information

Model Number	Connectors	
	IN	OUT
IPA014018N	N Female	N Female

Specifications and information are subject to change without notice.

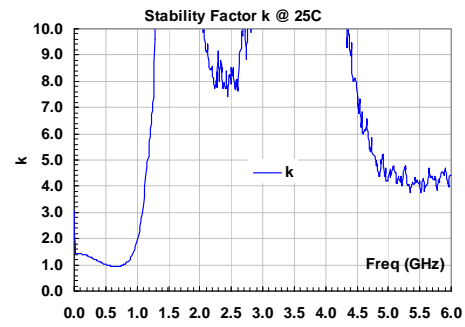
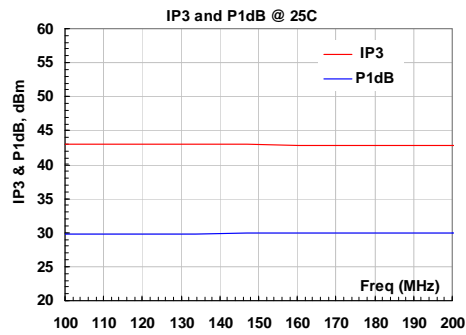
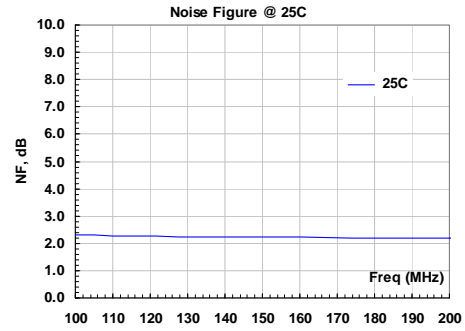
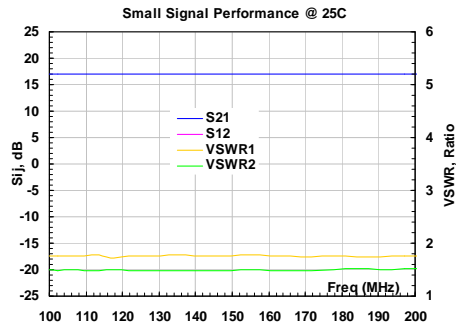


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Typical Data



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