

DESCRIPTION

The Argo Semi AS02219 IP is a Power detector with square low power detection operating in the frequency range of 2.4 GHz – 7.2 GHz. AS02219 has a bandwidth of 165 MHz while its range covers input power from -20 dBm to 10 dBm producing a voltage proportional to the received signal power (0 – 450 mV). Its small signal linearity (i1dBCP) at the presence of a large signal for various frequency offsets is kept stable and equal to 12 dBm. The detector is ideal for detecting the envelope of modulated signals in the frequency range of 2.4 GHz to 7.2 GHz. The input range can be extended with variable attenuator.

FEAUTURES

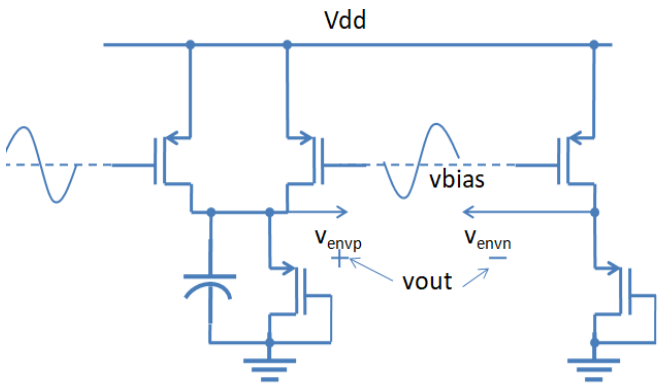
- ✓ Supply Voltage: 1.8 V
- ✓ Frequency range of operation: 2.4 GHz – 7.2 GHz
- ✓ Dynamic range: -20 to 10 dBm
- ✓ i1dBCP at the presence of large signal: 12 dBm
- ✓ Technology node: GF 22FDX CMOS SOI

APPLICATIONS

- WiFi 6/6E/7
- Bluetooth
- 5GNR
- LTE

ABOUT ARGO SEMICONDUCTORS

Argo Semiconductors offers high quality RF IP products operating in the frequency region between 2 GHz and 10 GHz. Argo’s team has a long experience on Wi-Fi RF silicon product development and cellular RF silicon product development, bringing billions of chips to the market. Leveraging on these capabilities and building on its solid IP base, Argo helps its customers develop products that can meet the most stringent requirements, while shrinking the development time. IP customization is possible upon request.



Simplified Block Diagram

Power detector Characteristics

Parameter	Minimum	Typical	Maximum	Units
Operating temperature range	-40		125	°C
operating frequency range	2.4		7.2	GHz
Bandwidth			160	MHz
I 1dBCP		12		dBm
Power consumption			100	uA
Dynamic Range	-20		10	dBm
leakage current		100n	1.4u	A
Area		0.12		mm²