RF schottky diodes

Simple and cost-effective solution for power detection and mixer applications



RF Schottky diodes

- Silicon low-barrier N-type devices used for highly sensitive power detection and mixer circuits

Target applications

- Consumer electronics, e.g. Wi-Fi routers
- Mobile devices
- 24GHz radar and low-noise block (LNB) system

Features

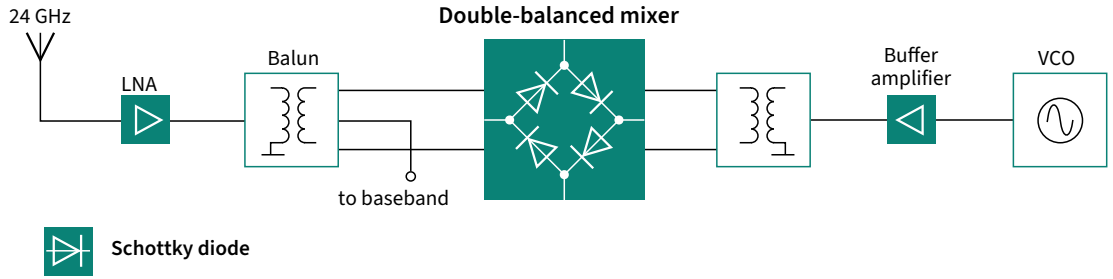
- Low forward voltage drop
- Low junction capacitance
- Various junction diode configurations

Benefits

- Fast switching
- Excellent choice as detector for high frequencies
- Higher linearity and power handling compared to integrated mixers
- Flexibility in circuit design



Application example: 24GHz radar system



Useful links

RF Schottky diode portfolio

Application notes:

Schottky diode mixer for 5.8GHz radar sensor

RF and microwave power detection with Schottky diodes

Design guide for RF transistors and diode in low noise block