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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

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# RF Schottky Diodes for High Frequency Detector, Mixer or Power Leveling



#### **General description**

- Excellent RF Schottky Diodes available as single, double, triple and quad
- Various diode configurations (e. g. common anode, common cathode)
- All products have additional guard-ring diode integrated on chip for overvoltage protection
- RoHS compliant package portfolio including industry standard sizes
  (e. g. SOT3x3) and super thin-small-leadless-packages
  (e. g. world smallest diode package TSSLP2, o.6\*o.3\*o.3mm³)
- Automotive (AECQ101) qualified



Detector, mixer and power leveling for:

Wireless LAN detector, cellular phone, 24GHz radar system, video detector, ...





## RF Mixer Diodes Performance Table & Product Highlights:

BAT24-02LS: Premium parasitic inductance combined with small capacitance values, best fit for high frequency up to 24GHz BAT15x: Best-in-class RF mixer/detector diodes in various packages and configurations

Family	V <sub>R</sub> max [V]	I <sub>F</sub> max [mA]	C <sub>T</sub> at oV [pF]	V <sub>F</sub> [V] at 1mA	Package	Configuration <sup>1)</sup>
BAT15	4	110	0.26	230	TSLP2/SOD323/SOT323/TSLP4/ SOT143	S/D/Q
BAT <sub>17</sub>	4	130	0.55	340	SOT23/SOT323/SOT143	S/D
BAT24	4	110	0.21	230	TSSLP2	S

# RF Signal Detection and Power Leveling Diodes Performance Table & Product Highlights:

BAT62-02LS: Super tiny RF Schottky detector diode in leadless package (0.6\*0.3\*0.3mm³ only) BAT63-02V: very low forward voltage combined with tiny package (1.6\*0.8\*0.55mm³ only)

Family	V <sub>R</sub> max [V]	I <sub>F</sub> max [mA]	C <sub>T</sub> at oV [pF]	V <sub>F</sub> [V]	I <sub>F</sub> [mA]	$R_o [k\Omega]$ @ V = oV	Package	Configuration <sup>1)</sup>
BAT62	40	20	0.35	580	2	225	SOT143/SOD323/SOT343 TSLP2/TSSLP2/SCD80/TSLP4	S/D
BAT63	3	100	0.65	190	1	30	SC79/SOT343	S/D
BAT68	8	130	0.75	318	1		SOT23/SOT323/SOT343/SOT363	S/D

1) Configuration: S=Single, D=Dual, T=Triple, Q=Quad

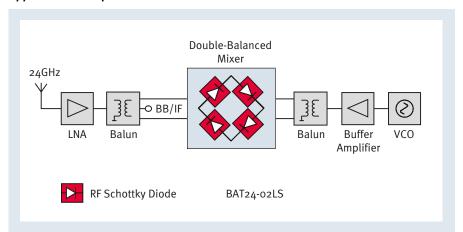
www.infineon.com/schottkydiodes

# **Small Signal Discretes**

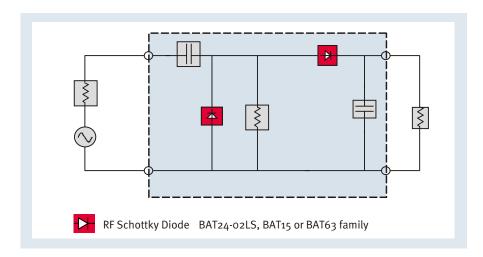


Never stop thinking

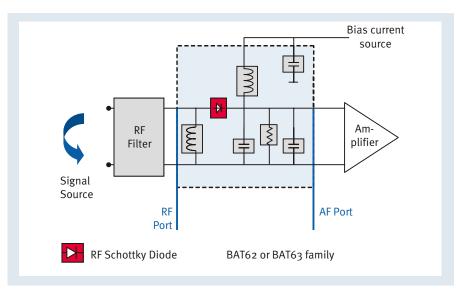
## **Application Examples**



BAT24-02LS for 24GHz Radar Mixer Cell



Virtual battery using BAT15, BAT24 or BAT63 family



High Frequency RF Detection using BAT62 or BAT63 family

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