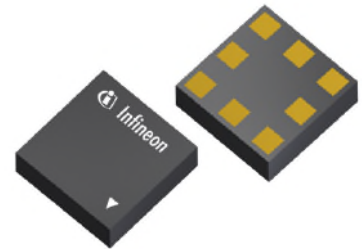


# BGSA20VGL8

## High RF Voltage Dual SPST Antenna Switch

### Features

- Dual SPST designed for high-linearity antenna aperture switching and RF tuning applications
- Low  $R_{ON}$  resistance of  $1.6 \Omega$  at each port in ON state
- Low  $C_{OFF}$  capacitance of 240 fF at each port in OFF state
- $> 67$  V RF voltage OFF state handling
- Low harmonic generation
- GPIO control interface - including 4 control states
- Supply voltage range: 1.65 to 3.6 V
- No RF parameter change within supply voltage range
- Small form factor 1.1 mm x 1.1 mm (MSL1, 260° C per JEDEC J-STD-020)
- Suitable for EDGE/CDMA/WCDMA/C2K/LTE/5G Applications
- RoHS and WEEE compliant package

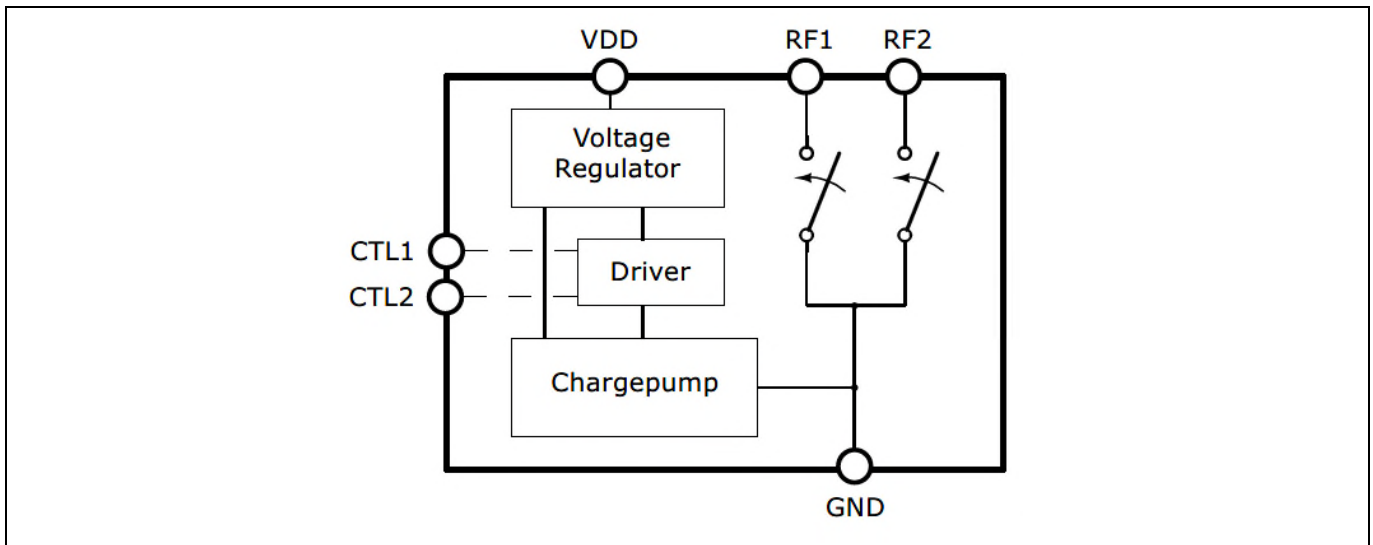


### Description

The BGSA20VGL8 is a versatile Dual Single-Pole Single-Throw (SPST) RF antenna shunt aperture switch optimized for low  $C_{OFF}$  as well as low  $R_{ON}$  enabling applications up to 6.0 GHz. This single supply chip integrates 2 digital control pins. Unlike GaAs technology, the 0.1 dB compression point exceeds the switch maximum input power level, resulting in linear performance at all signal levels, and external DC blocking capacitors at the RF ports are only required if DC voltage is applied externally. Due to its very high RF voltage ruggedness, it is suited for switching any reactive devices such as inductors and capacitors in RF matching circuits without significant losses in quality factors.

# High RF Voltage Dual SPST Antenna Switch

## Block diagram and ordering information



**Figure 1** BGS20VGL8 Block diagram

**Table 1** Ordering Information

Type	Package	Marking
BGS20VGL8	TSNP-8-1	V



WEEE Compliant Package



Halogen-Free  
PB Free



RoHS

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Edition 2019-09-16

Published by

Infineon Technologies AG  
81726 München, Germany

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