

BGSA20UGL8

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 $2.3\ \Omega$ at each port in ON state
- Low C_{OFF} capacitance of 200 fF at each port in OFF state
- $> 80\text{ V}$ 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 BGSA20UGL8 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.

Block diagram and ordering information

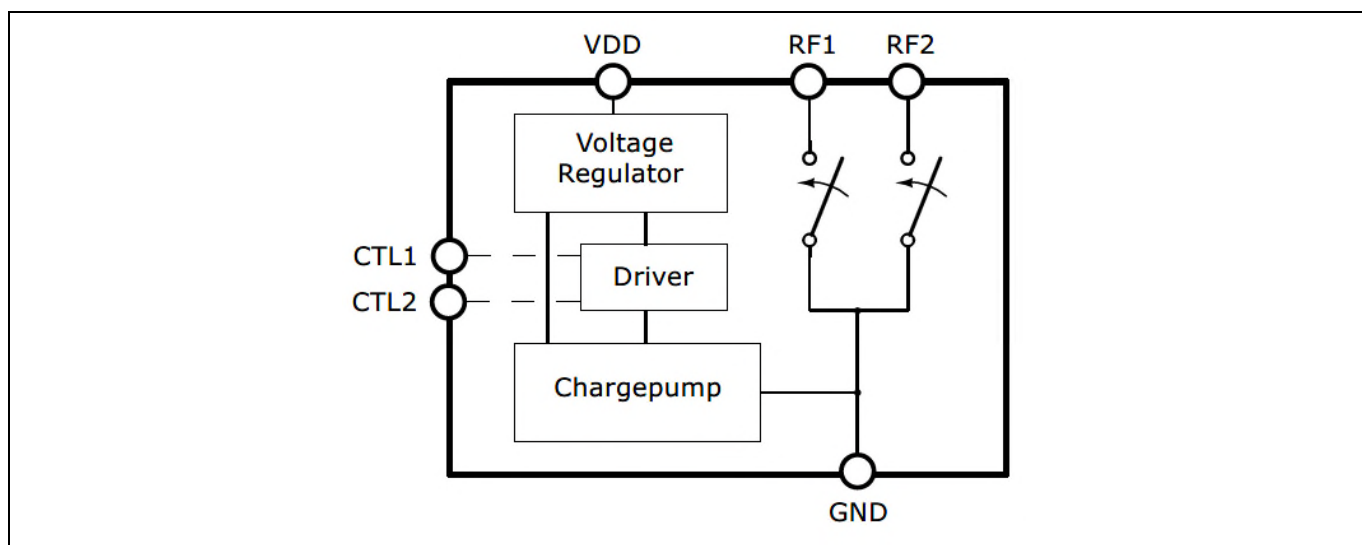


Figure 1 BGSA20UGL8 Block diagram

Table 1 Ordering Information

Type	Package	Marking
BGSA20UGL8	TSNP-8-1	U



WEEE Compliant
Package



Halogen-Free
PB Free



RoHS

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