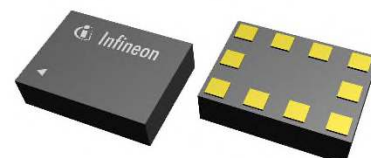


BGSA144ML10

Ultra high RF voltage antenna tuning SP4T

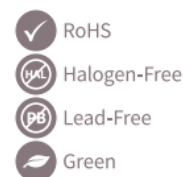
Features

- Low R_{ON} resistance of 1.74Ω at each RF port in ON state
- Ultra low C_{OFF} capacitance of 89 fF in OFF state
- Individually controlled reflective open or short to ground OFF ports to eliminate unwanted antenna resonances
- High RF operating voltage handling 80 V in OFF state
- MIPI RFFE 2.1 compliant control interface
- External USID_SEL pin enabling 4 default USID addresses
- Small form factor 1.1 mm x 1.5 mm (MSL1, 260 °C per JEDEC J-STD-020)



Potential applications

- Impedance, Antenna and Inductance Tuning
- Tunable Filters



Description

The BGSA144ML10 is a single-pole four throws (SP4T) Antenna Tuning switch optimized for RF applications up to 7.125 GHz.

The BGSA144ML10 is made of 4 low ON resistance / low OFF capacitance series switches and 4 shunt to ground switches enabling on-demand open-reflective or short-reflective OFF ports behavior. This last feature is of great value to reduce antenna engineer development time in case of unwanted antenna resonance or to improve antenna efficiency with less component tuning effort.

Block diagram and ordering information

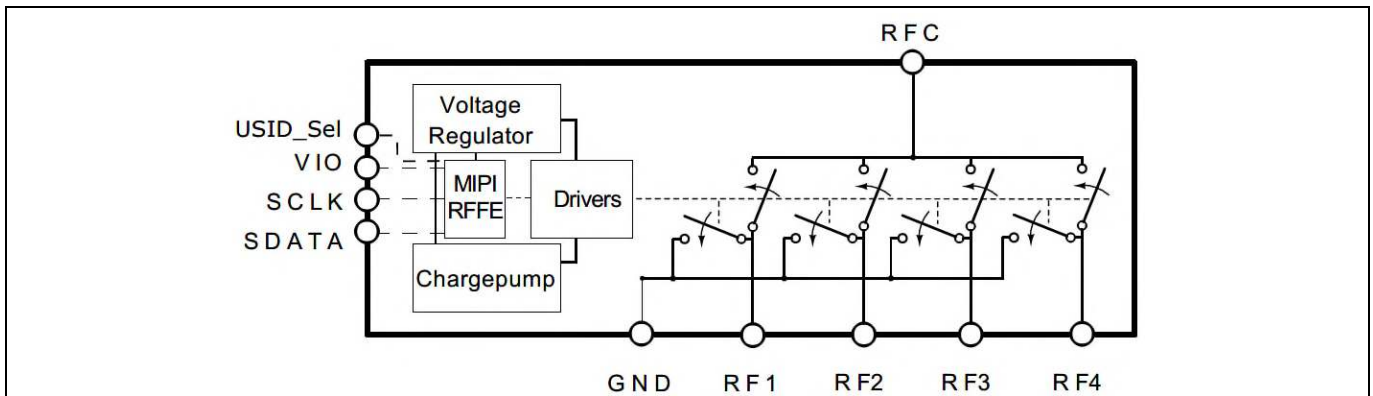


Figure 1 BGSA144ML10 Block diagram

Table 1 Ordering Information

| Type | Marking | Package | Product name |
|-------------|---------|-----------|--------------------|
| BGSA144ML10 | A4 | TSLP-10-3 | BGSA 144ML10 E6327 |

For more technical information, please contact our Technical Assistance Center or your local Infineon representative.

Trademarks

All referenced product or service names and trademarks are the property of their respective owners.

Edition 2019-09-16
 Published by
Infineon Technologies AG
 81726 München, Germany

© 2022 Infineon Technologies AG.
 All Rights Reserved.

Do you have a question about this document?

Email: erratum@infineon.com

Document reference

ifx1

IMPORTANT NOTICE

The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics ("Beschaffenheitsgarantie").

With respect to any examples, hints or any typical values stated herein and/or any information regarding the application of the product, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation warranties of non-infringement of intellectual property rights of any third party.

In addition, any information given in this document is subject to customer's compliance with its obligations stated in this document and any applicable legal requirements, norms and standards concerning customer's products and any use of the product of Infineon Technologies in customer's applications.

The data contained in this document is exclusively intended for technically trained staff. It is the responsibility of customer's technical departments to evaluate the suitability of the product for the intended application and the completeness of the product information given in this document with respect to such application.

For further information on the product, technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies office (www.infineon.com).

WARNINGS

Due to technical requirements products may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by Infineon Technologies in a written document signed by authorized representatives of Infineon Technologies, Infineon Technologies' products may not be used in any applications where a failure of the product or any consequences of the use thereof can reasonably be expected to result in personal injury.