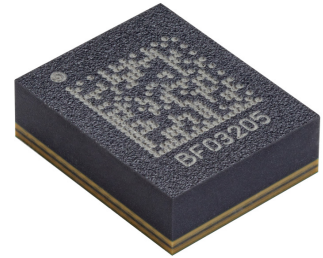


PRODUCT BRIEF

MM5140

8 GHz SP4T RF Switch



The MM5140 is a high-power SP4T switch built on Menlo Micro's Ideal Switch® technology. This innovative technology enables highly reliable switches capable of greater than 25 W forward power. The MM5140 provides ultra-low insertion loss and superior linearity as an SP4T operating from DC to 8 GHz, with greater than 3 billion switching cycles.

The MM5140 is an ideal solution for replacing large RF electromechanical relays, as well as RF/microwave solid-state switches in applications where linearity and insertion loss are critical parameters. The MM5140 features an integrated driver circuit with SPI and GPIO interface control options and an integrated charge pump to drive the gate.

FEATURES

- DC to 8 GHz Frequency Range
- Integrated High-Voltage Driver
- 25 W (CW), 150 W (Pulsed) Max Power Handling
- Low On-State Insertion Loss: 0.5 dB @ 8 GHz
- Low Return Loss: 14 dB @ 8 GHz
- High Linearity, IIP3 90 dBm Typical
- >25 dB Isolation @ 6 GHz
- Low Power Consumption <15mW
- High Reliability > 3 billion Switching Operations
- 5.2 mm x 4.2 mm LGA Package

APPLICATIONS

- Tunable & Programmable Filters
- High Power, Low-Loss RF Switch Matrices
- Programmable RF Steering Components
- EM Relay Replacement

MARKETS

- Wireless
- Aerospace & Defense
- Test & Measurement

FIG. 1 Functional Block Diagram

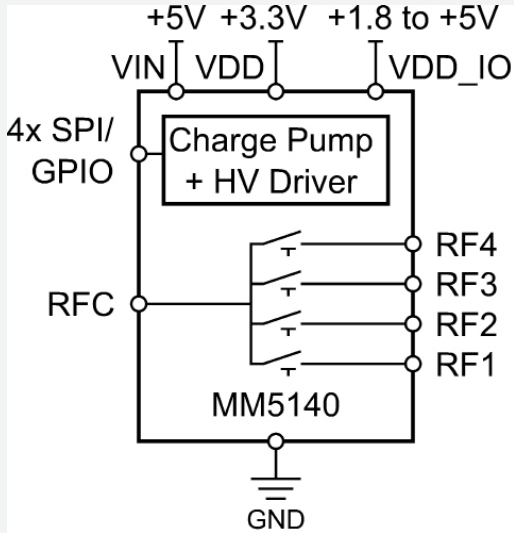


FIG. 2 MM5140 Evaluation Board

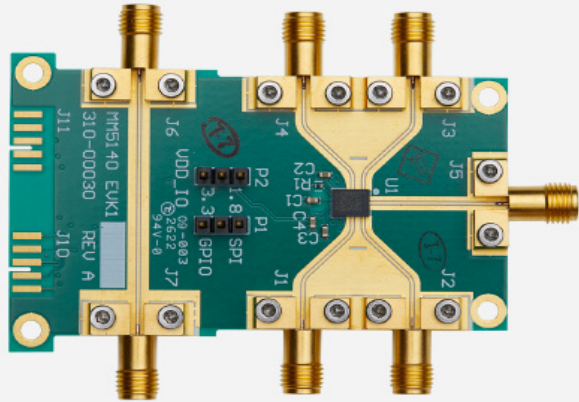


FIG. 3 Typical Insertion Loss Performance

