

MM5800

DC to 70GHz SPDT

Millimeter Wave Switch



The MM5800 device is an SPDT micro-mechanical switch optimized for ultra-wideband applications from DC to 70GHz.

It provides ultra-low insertion loss in a small form-factor and a lifetime of greater than 3 billion switching cycles.

The two switch channels are individually controllable by applying a gate voltage to the corresponding RF GATE pin.

FEATURES (TARGET SPECS)

- DC-70GHz Frequency Range
- 4 W (CW), 40W (Pulsed) Max Power Handling
- Low On-State Insertion Loss: <2 dB @ 70GHz
- High Linearity: < -120 dBc Harmonics
- High Isolation: >25 dB @ 70GHz
- High Reliability >3.0x10⁹ Switching Operations
- 2.7 x 2.1 x 0.9 mm WLCSP Package

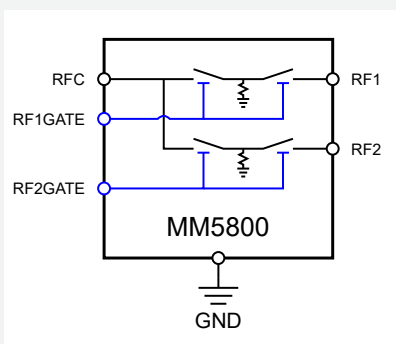
TARGET APPLICATIONS

- Wafer Testing for High-Speed Ethernet
- Millimeter Wave Radar Systems
- Cryogenic Test Systems

TARGET MARKETS

- Aerospace & Defense
- Wireless & Telecom
- Test & Measurement
- Cryogenic Systems

FIG. 1 Functional Block Diagram



SIMULATED S-PARAMETER PERFORMANCE

FIG. 2 MM5800 SPDT Insertion Loss

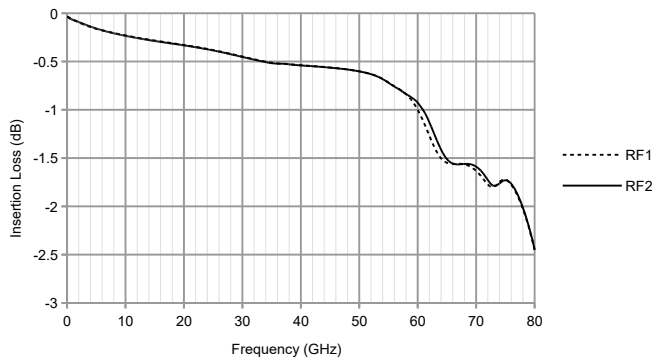


FIG. 3 MM5800 SPDT Return Loss

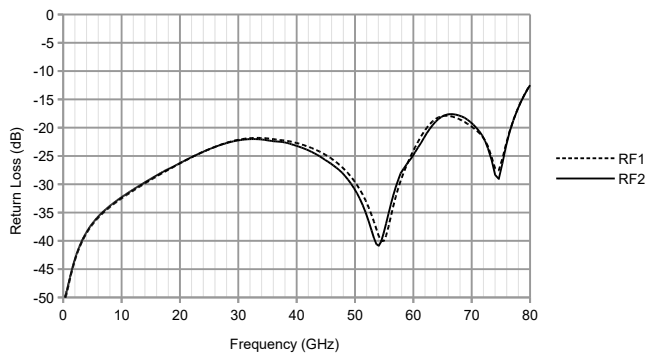


FIG. 4 MM5800 SPDT Isolation (RF1 ON)

