

PRODUCT BRIEF

MM5120

12GHz High Power RF SP4T Switch

The Menlo Micro MM5120 is the world's first generally available high-power RF SP4T micro-mechanical switch. Menlo Micro has developed a new fabrication process and applied it to DC and wideband RF/microwave switch applications. This new innovative technology enables robust and highly reliable switches capable of greater than 25 W CW power handling at 6.0 GHz.

The MM5120 provides ultra-low insertion loss and superior linearity from 12 GHz down to DC, with greater than 3 billion switching cycles guaranteed at +85 °C. Integrated high voltage generation simplifies usage when only a single low voltage is required for operation.

The MM5120 is an ideal solution for replacing large RF electromechanical relays, as well as RF/microwave solid-state switches where linearity and insertion loss are critical parameters.

FEATURES

- DC to 12 GHz Frequency Range
- 25 W (CW), 150 W (Pulsed) Power Handling @ 6.0 GHz
- Ultra-Low Insertion Loss, 0.35 dB @ 6 GHz
- IP3 > 85 dBm
- 25 dB Isolation @ 6 GHz
- Maximum Voltage (AC or DC):
- +/-150 V on RF Input
- High Reliability, > 3.0 Billion Switch Cycles
- Integrated Gate Control and
- High Voltage Generator
- 4.0 mm x 4.0 mm Lead-Free RoHS Compliant BGA Package

APPLICATIONS

- Switched Filter Banks and Tunable Filters
- High Power RF Front-Ends
- Low-Loss Switch Matrices
- RF EM Relay Replacement
- Antenna Tuning
- Antenna Beam Steering
- Digital Step Attenuators

MARKETS

- Defense and Aerospace
- Test and Measurement
- Wireless Infrastructure

FIG. 1 Wafer Level Chip Scale Package

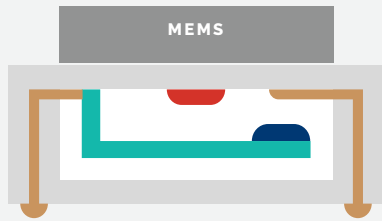


FIG. 2 Functional Block Diagram

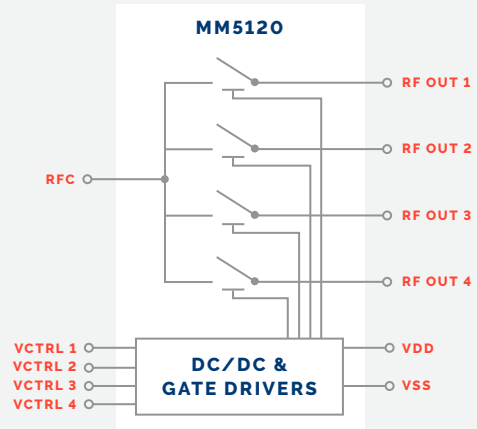


FIG. 3 MM5120

