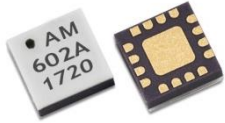


# AM6002A - Switch

## DC to 14 GHz SPDT

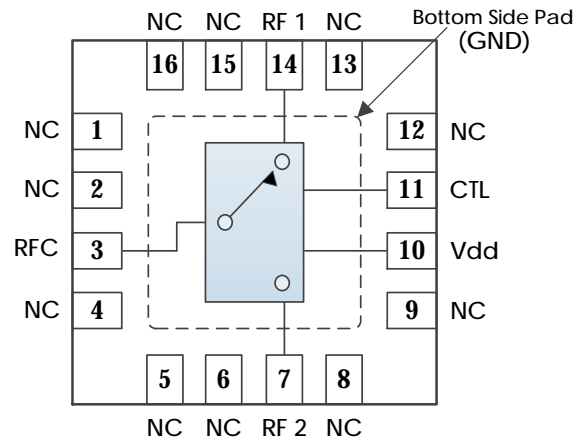


AM6002A is a Single-Pole Double-Throw (SPDT) switch covering the DC to 14 GHz frequency range. This positive control device exhibits low insertion loss, flat frequency response and high isolation over the operating temperature range.

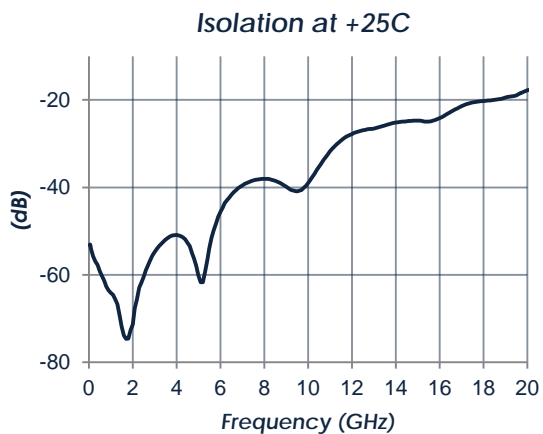
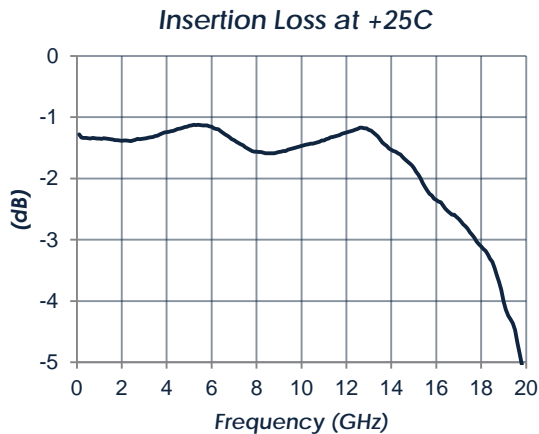
### Features

- 2.0 dB insertion loss
- +5V supply
- +3V control
- 30 dB isolation
- +36 dBm IP3
- +21 dBm P1dB
- 3 mm QFN package
- -40C to +85C operation

### Functional Diagram

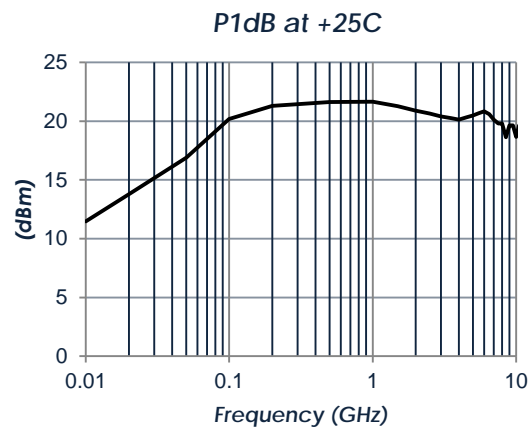
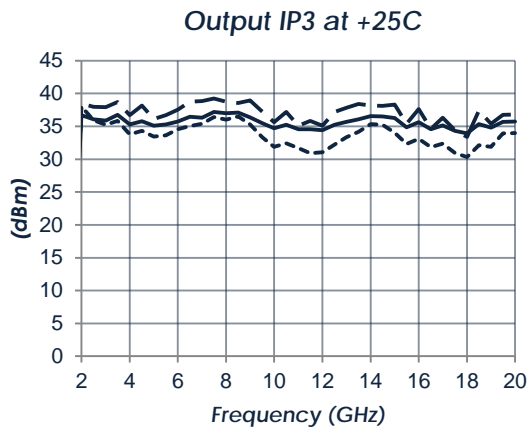
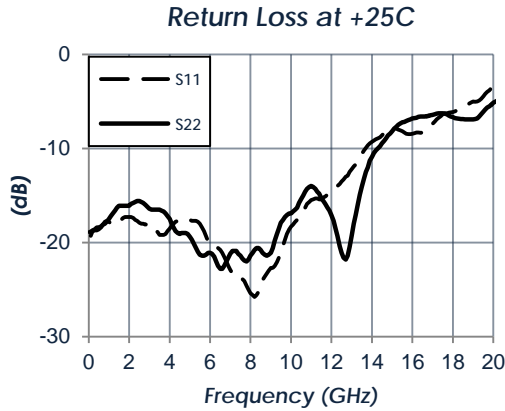


### Performance



# AM6002A - Switch

## DC to 14 GHz SPDT



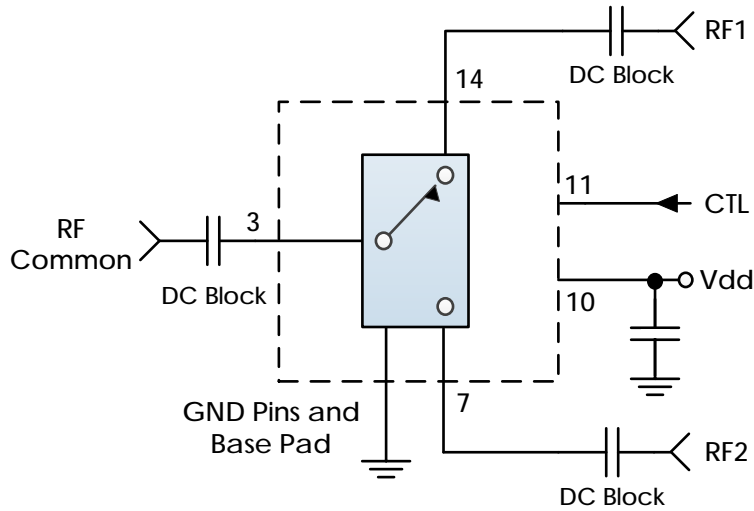
### Additional Specifications

RF Impedance	50 ohms
Supply Voltage (Vdd)	+4.5V to +5.2V
Supply Current	0.5mA typ, 0.6mA max
Control Voltage Range (CTL)	0.0V to +0.5V (Low) +2.0V to 5.0V (High)
Control Current	200uA typ
Maximum RF Input	+24dBm
Switching Speed	100 ns
Operating Temperature Range	-40C to +85C
Storage Temperature Range	-50C to +125C

# AM6002A - Switch

## DC to 14 GHz SPDT

### Typical Application Circuit



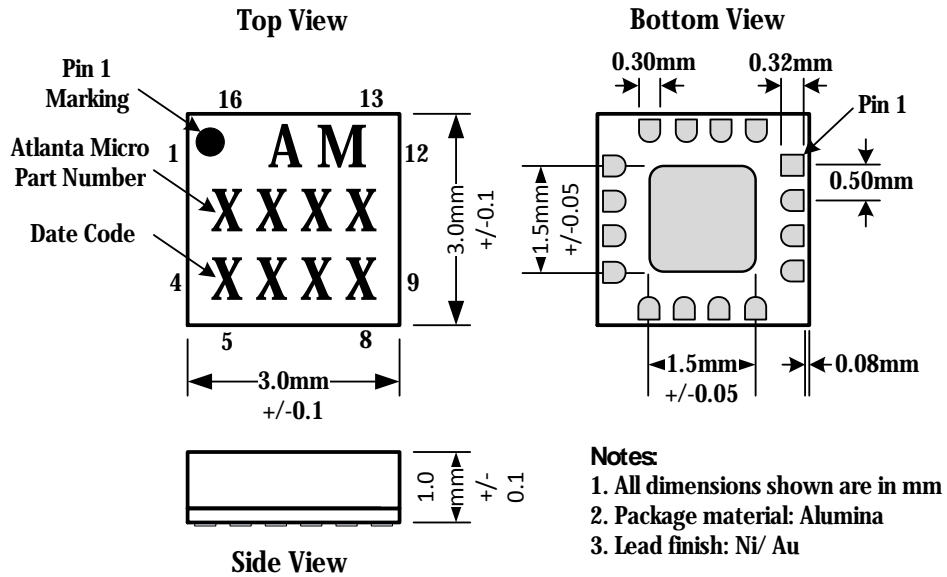
\*External DC blocking capacitors are required. Select capacitance values for low impedance across the frequency range of interest. See table below for CTL control information. NC pins may be left open or connected to ground.

Control Line	RFC to RF1	RFC to RF2
CTL		
L	On	Off
H	Off	On

# AM6002A - Switch

DC to 14 GHz SPDT

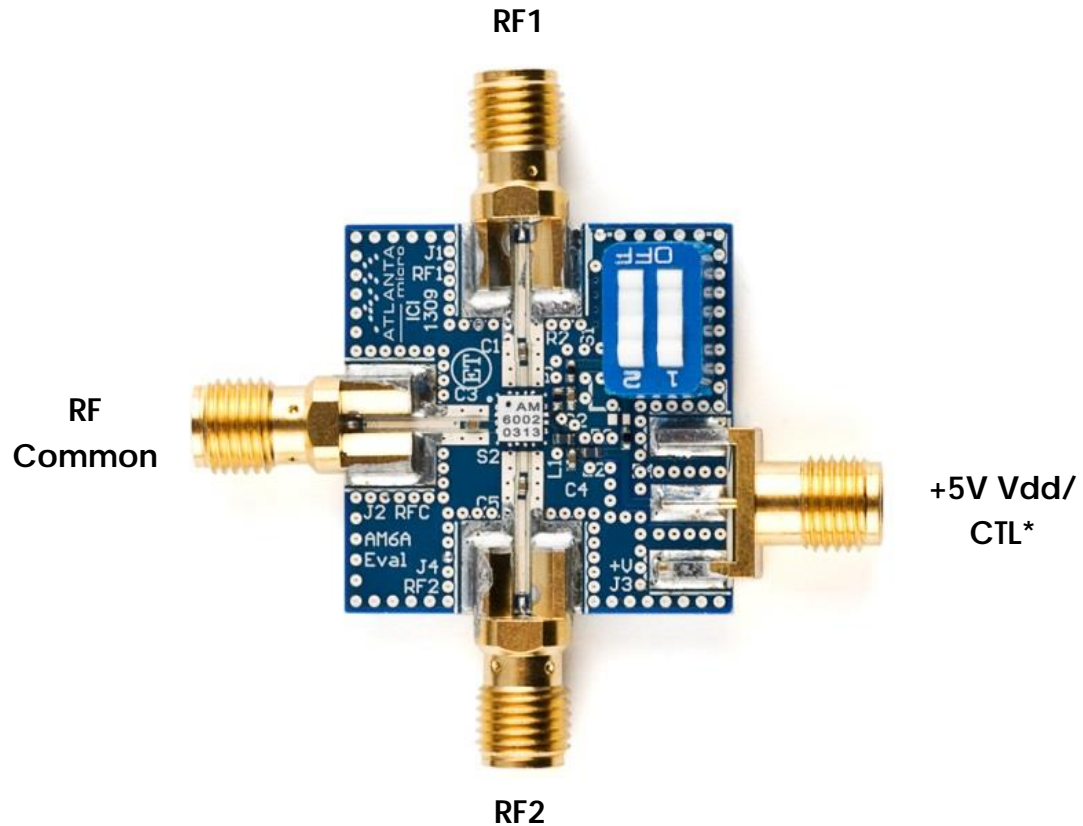
## Package Details



# AM6002A - Switch

DC to 14 GHz SPDT

Evaluation PC Board



\* On the evaluation board, CTL is derived from the +5V supply and is controlled by the DIP switch. Toggle DIP switch 1 to change the RFC switch connection between RF1 and RF2.