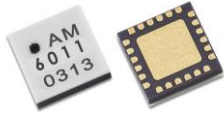


# AM6011 - Switch

## DC to 10 GHz SP8T

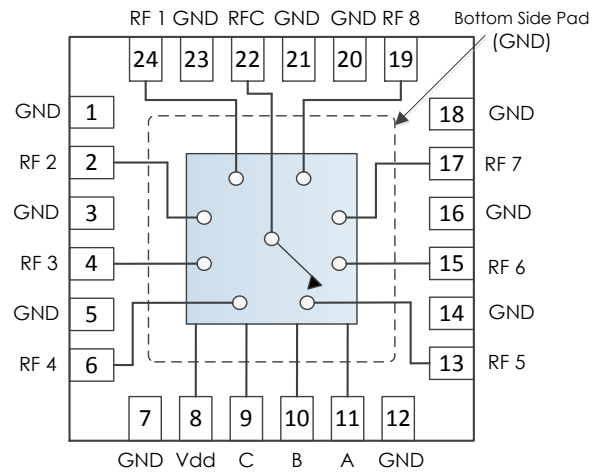


AM6011 is a Single-Pole Eight-Throw (SP8T) switch covering the DC to 10 GHz frequency range. The positive control device provides low insertion loss, flat frequency response, and high isolation over the operating temperature range of -40C to +85C.

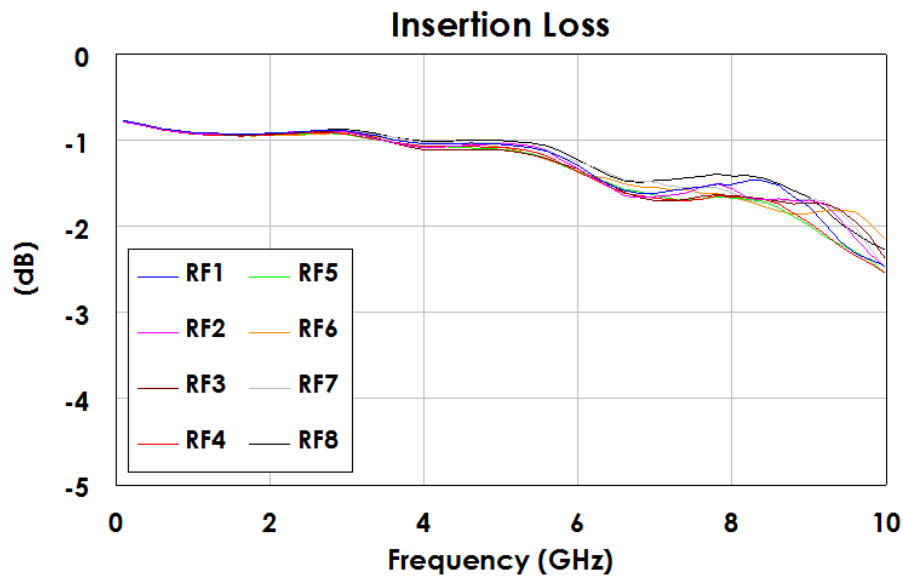
### Features

- 1.0 dB insertion loss
- +5V supply
- +3V control
- >20dB isolation
- +40dBm IP3
- +27dBm P1dB
- 4mm QFN package
- -40C to +85C operation

### Functional Diagram



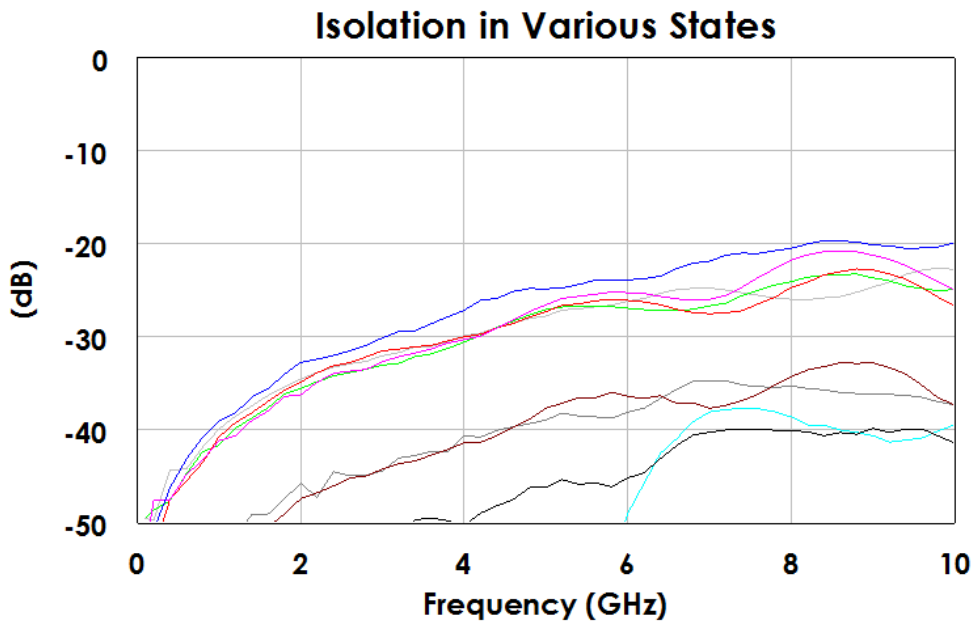
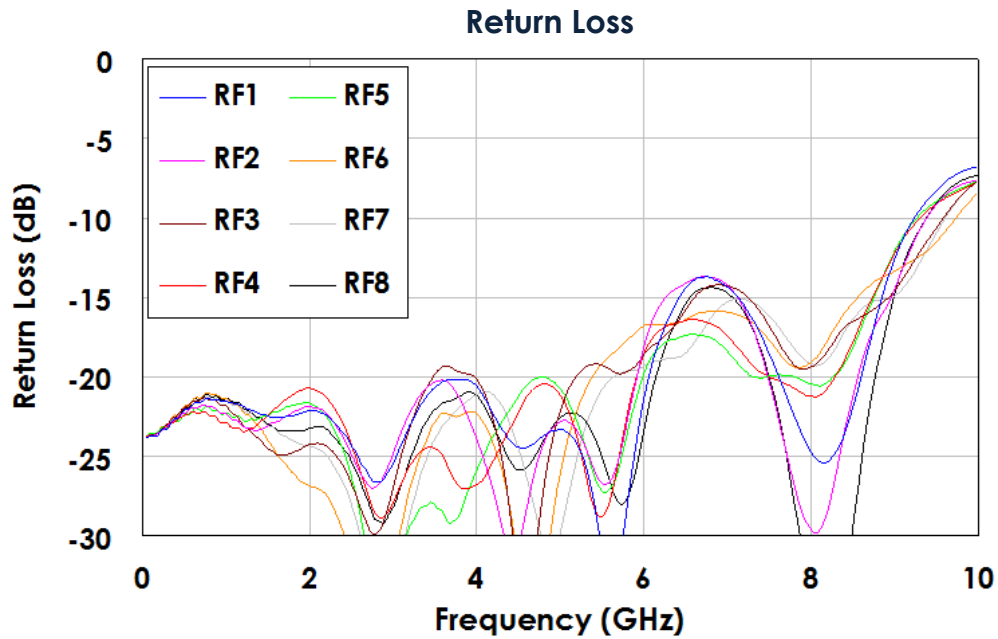
### Typical Performance



# AM6011 - Switch

DC to 10 GHz SP8T

Typical Performance



# AM6011 - Switch

DC to 10 GHz SP8T

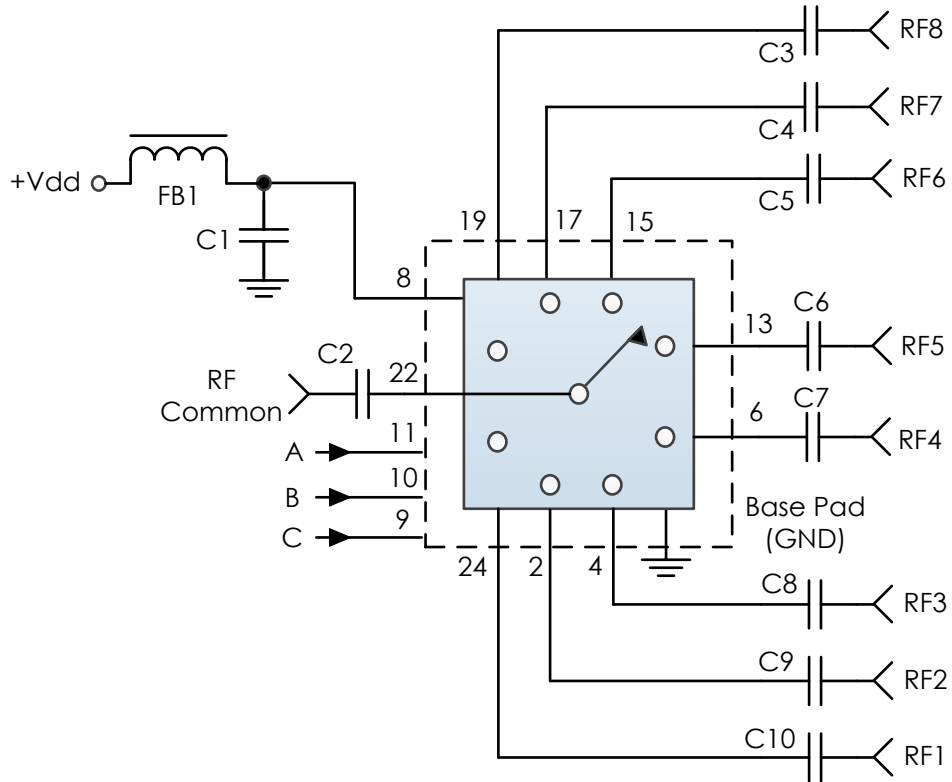
## Additional Specifications

RF Impedance	50 ohms
Supply Voltage (Vdd)	+4.5V to +5.2V
Supply Current	14mA typ
Control Voltage Range (A, B, C)	0.0V to +0.5V (Low) +2.0V to 5.0V (High)
Control Current	200uA typ
Maximum RF Input	+27dBm
Switching Speed	850ns typ, 1us max
Operating Temperature Range	-40C to +85C
Storage Temperature Range	-50C to +125C

# AM6011 - Switch

## DC to 10 GHz SP8T

### Typical Application Circuit



#### Recommended Component List (or equivalent):

Part Type	Value	Part Number	Manufacturer
C2 – C10	0.1uF	0402BB104KW160	Passives Plus
C1	0.1uF	C1005X7R1H104K050BB	TDK
FB1	-	MMZ1005A222E	TDK

#### Notes:

1. RF blocking capacitors should be high performance, low-loss, broadband capacitors for optimum performance.
2. RC filtering on the control lines is recommended to prevent digital noise from coupling to the RF path.

# AM6011 - Switch

DC to 10 GHz SP8T

## Control Table

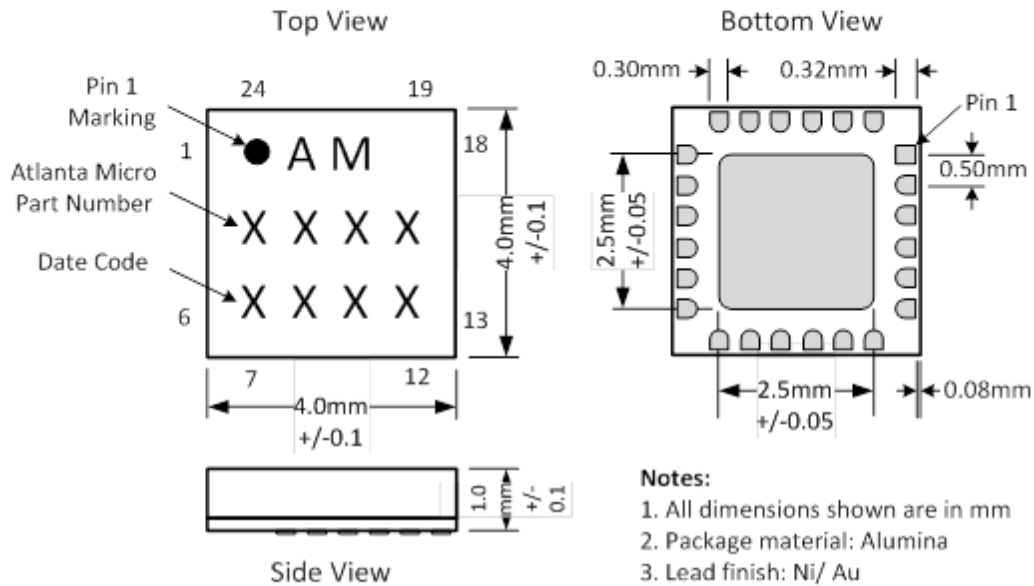
Control Line			RFC to :
A	B	C	
L	L	L	RF1
L	L	H	RF2
L	H	L	RF3
L	H	H	RF4
H	L	L	RF5
H	L	H	RF6
H	H	L	RF7
H	H	H	RF8

# AM6011 - Switch

DC to 10 GHz SP8T

## Package Details and Footprint

### Package Drawing



### Recommended Footprint

