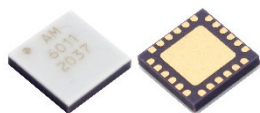


# AM6011 – Switch

## DC to 10 GHz SP8T

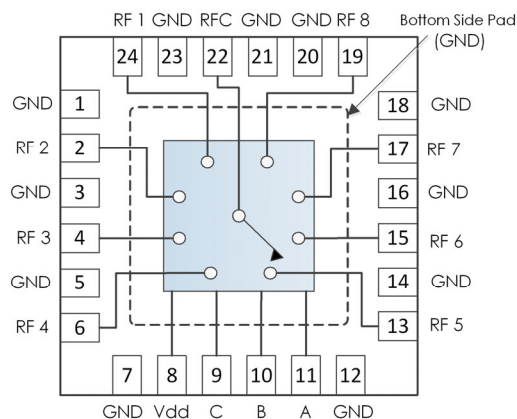


**AM6011 is a Single-Pole Eight-Throw (SP8T) switch covering the DC to 10 GHz frequency range.** The positive control device provides low insertion loss, flat frequency response, and high isolation over the operating temperature range of -40°C to +85°C.

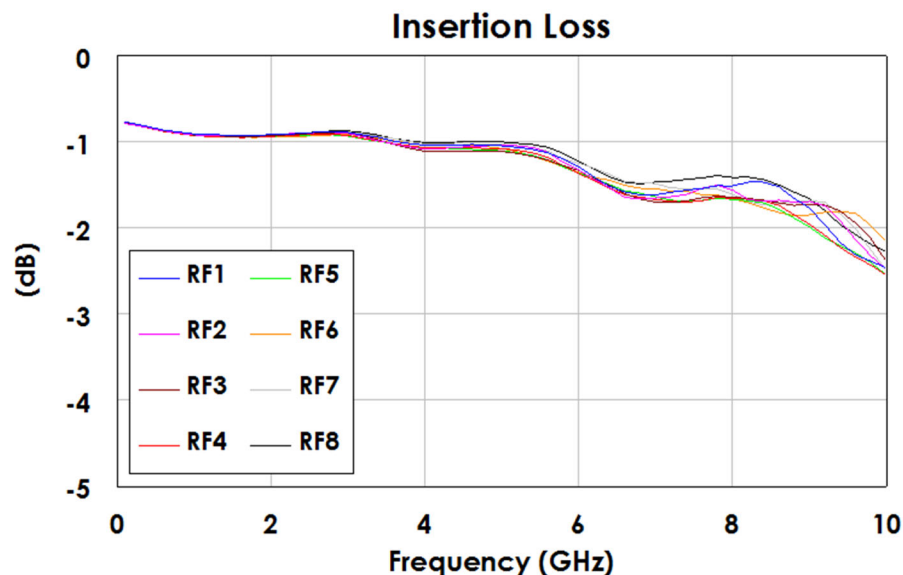
### FEATURES

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

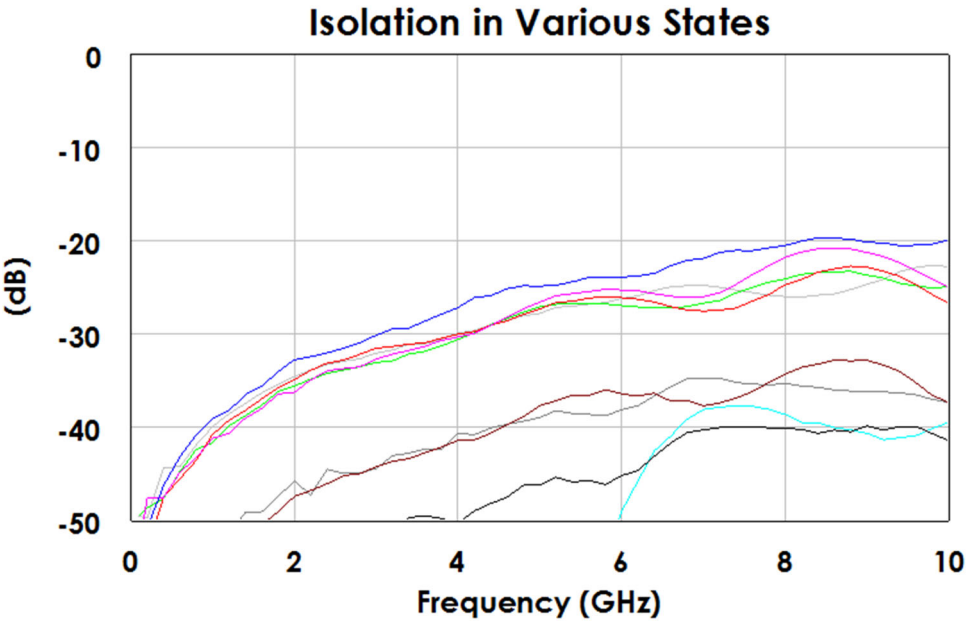
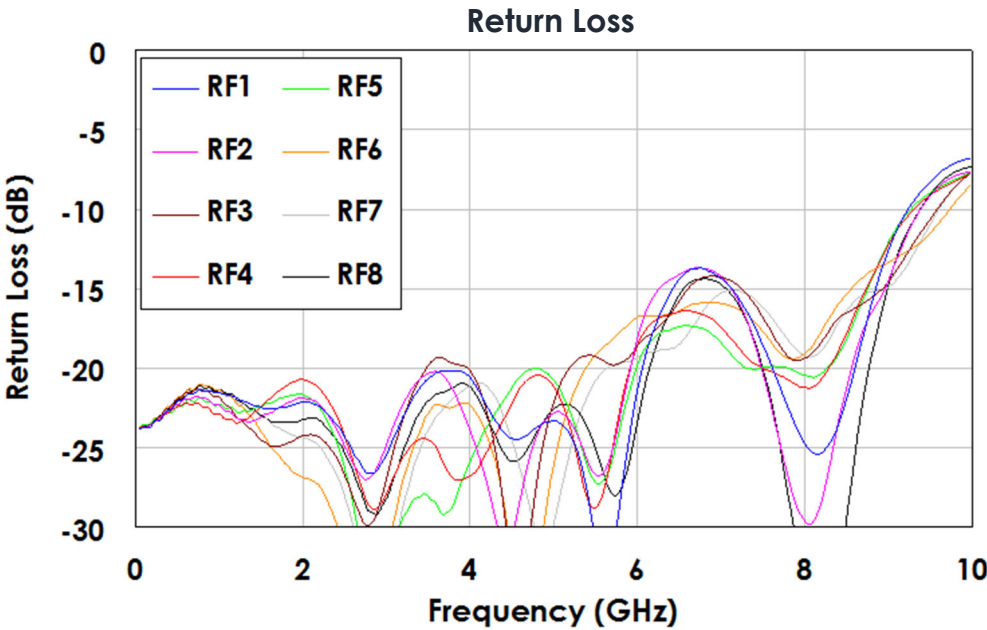
### FUNCTIONAL DIAGRAM



### TYPICAL PERFORMANCE



TYPICAL PERFORMANCE (CONTINUED)



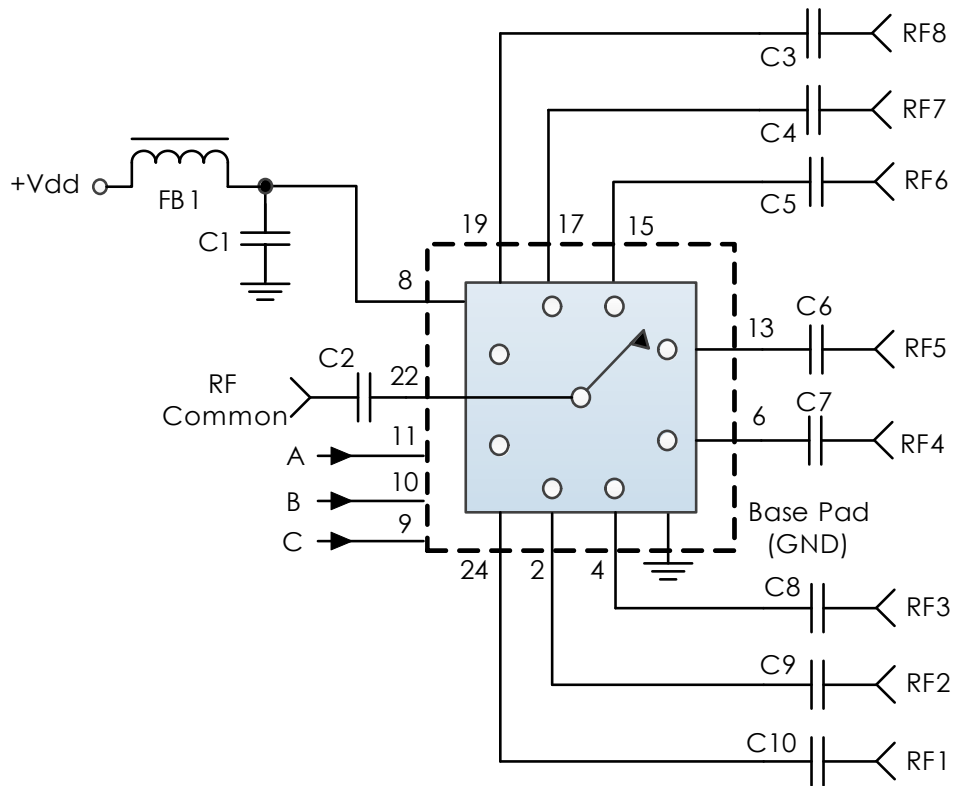
## ADDITIONAL SPECIFICATIONS

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

## 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

## TYPICAL APPLICATION CIRCUIT



## Recommended Component List (or Equivalent)

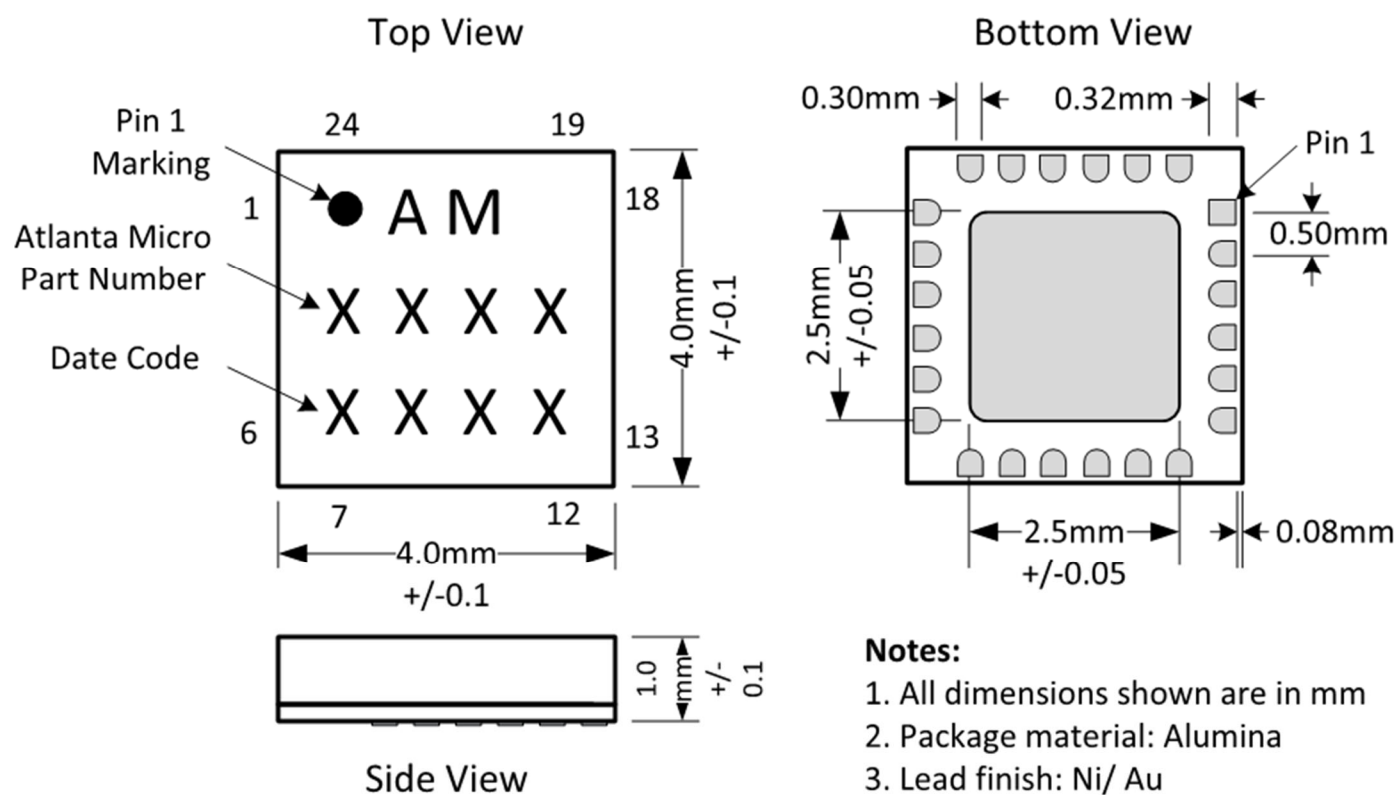
Part	Value	Part Number	Manufacturer
C2 - C10	0.1 $\mu$ F	0402BB104KW160	Passives Plus
C1	0.1 $\mu$ F	C1005X7R1H104K050BB	TDK
FB1	-	MMZ1005A222E	TDK

## Notes:

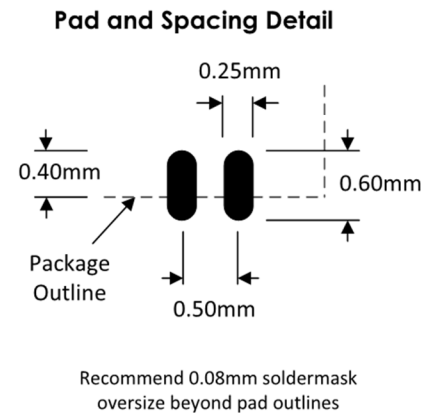
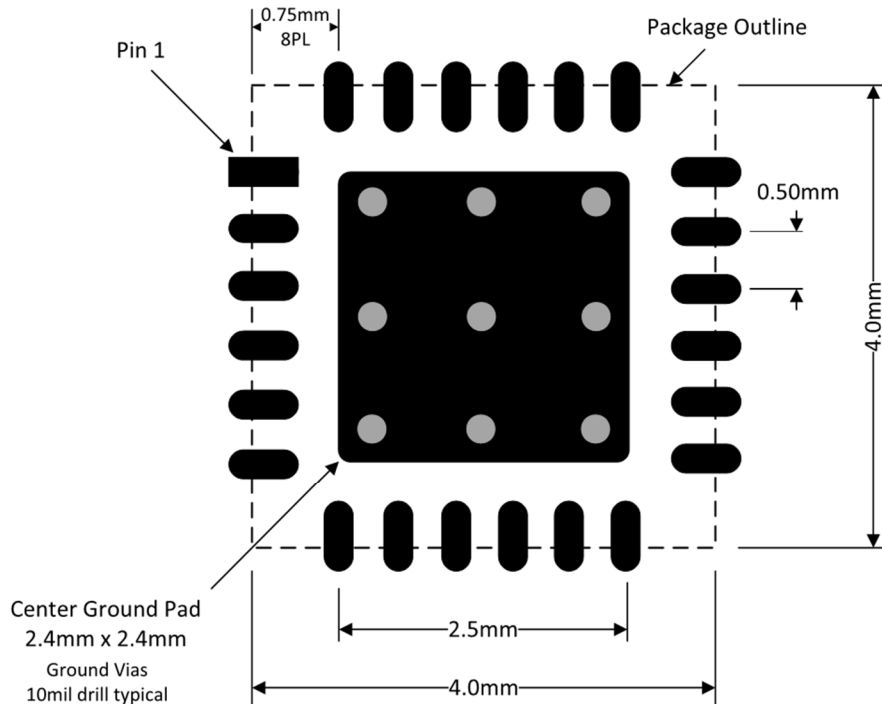
1. RF blocking capacitors should be high performance, low-loss, broadband capacitors for optimum performance..
2. RC filtering on the control lines is recommended to prevent digital noise from coupling to the RF path.

## PACKAGE DETAILS AND FOOTPRINT

## Package Drawing



## Recommended Footprint



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