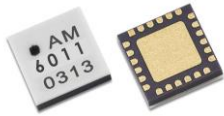


AM6011 - Switch

DC to 10 GHz SP8T

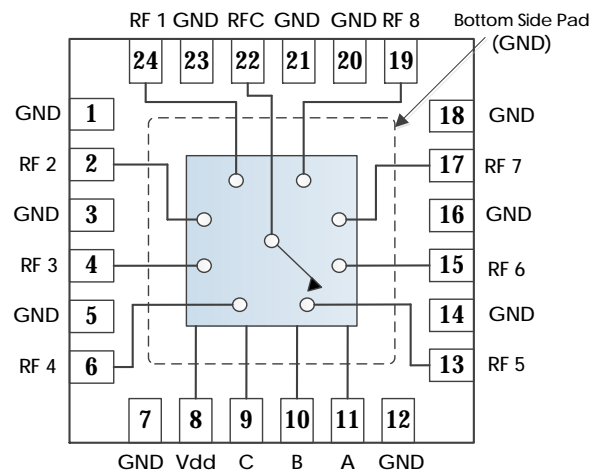


AM6011 is a Single-Pole Eight-Throw (SP8T) switch covering the DC to 10 GHz frequency range. The positive control device provides low insertion loss, flat frequency response, and high isolation over the operating temperature range of -40C to +85C.

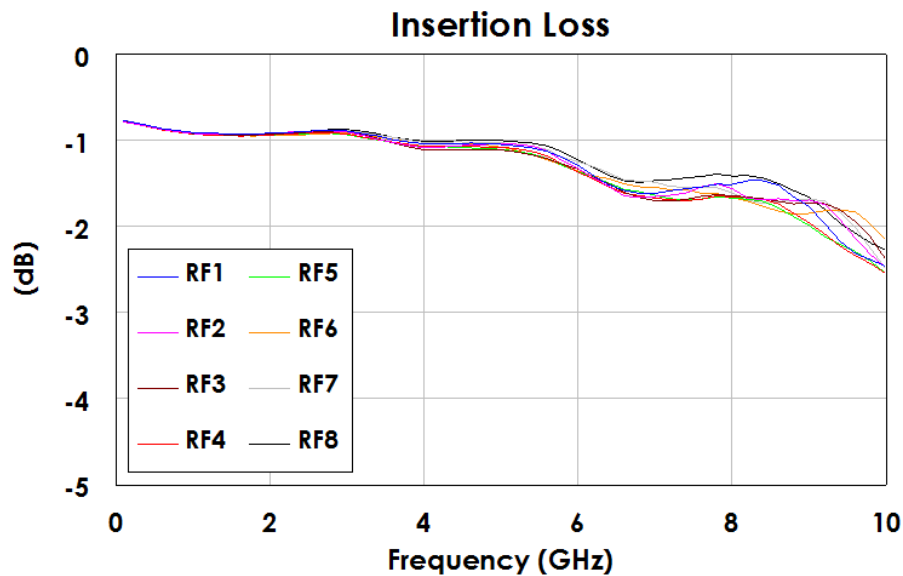
Features

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

Functional Diagram



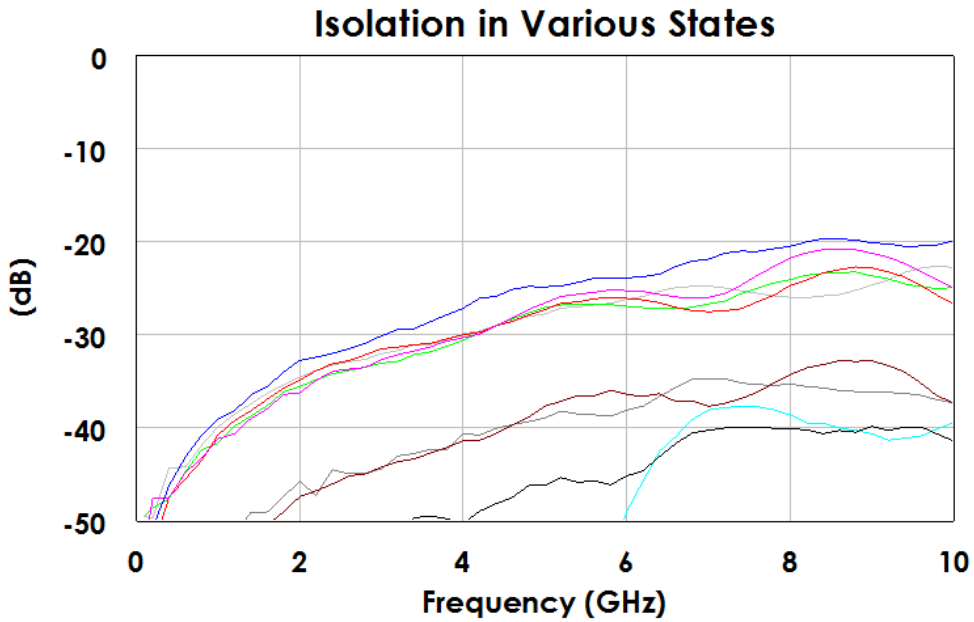
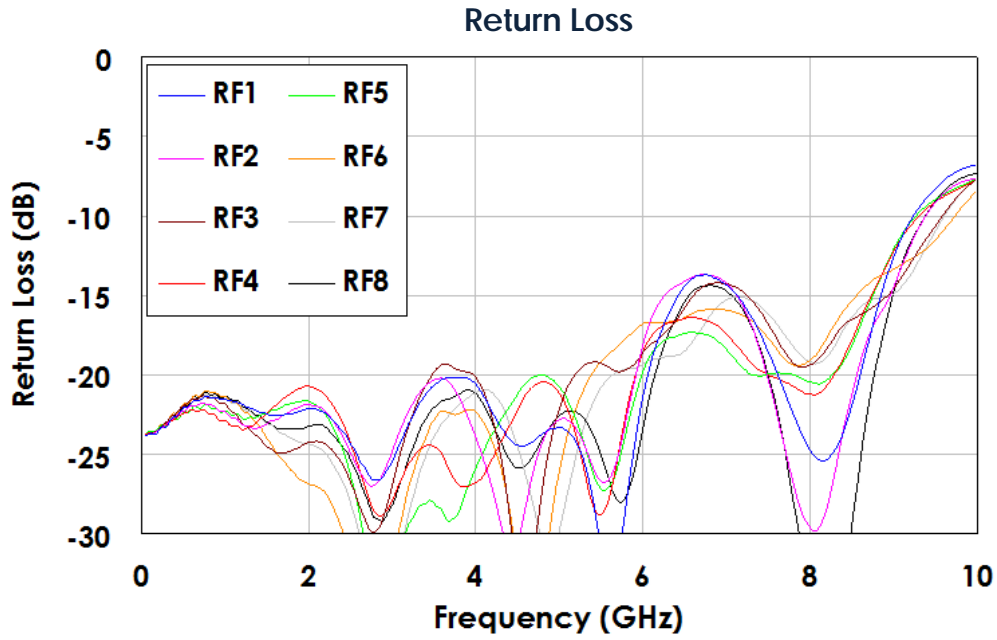
Typical Performance



AM6011 - Switch

DC to 10 GHz SP8T

Typical Performance



AM6011 - Switch

DC to 10 GHz SP8T

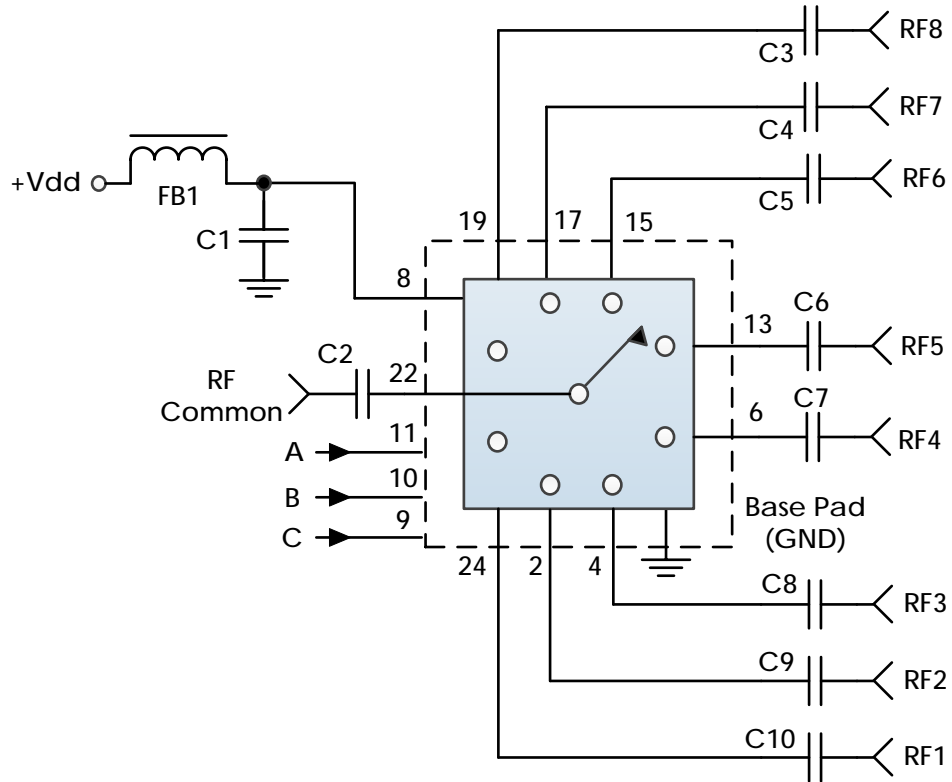
Additional Specifications

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

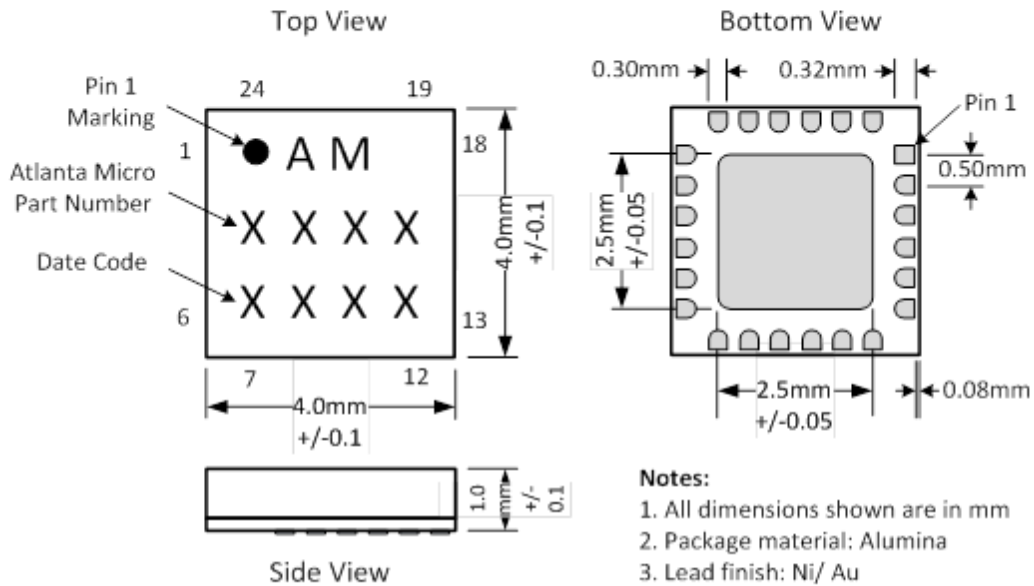
Control Line			RFC to :
A	B	C	
L	L	L	RF1
L	L	H	RF2
L	H	L	RF3
L	H	H	RF4
H	L	L	RF5
H	L	H	RF6
H	H	L	RF7
H	H	H	RF8

AM6011 - Switch

DC to 10 GHz SP8T

Package Details and Footprint

Package Drawing



Recommended Footprint

