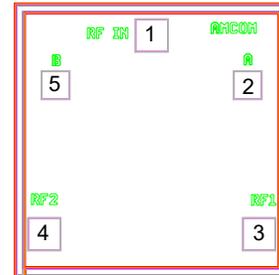


DESCRIPTION

AMCOM's AM000200S2WM-00-R is a Single-Pole double Throw (SPDT) reflective switch fabricated using GaAs process. It operates at frequencies from DC-20 GHz Isolation of 35 dB. The Switch is offered in Bare Die form and requires very small amount of control current to operate.



FEATURES

- Broadband from DC to 20 GHz
- Power handling : 25 dBm CW
- Insertion loss: 1.25dB @ 10GHz ,
2.5dB @ 20 GHz
- Isolation : 35dB

APPLICATIONS

- Radar
- Commercial communication systems
- Test instruments
- TR/TX modules

TYPICAL PERFORMANCE *

Parameters	Minimum	Typical **	Maximum
Frequency	-	DC -20 GHz	
Insertion loss 10GHz	-	1.25dB	
Insertion loss 20GHz		2.5dB	
P0.1dB	-	23dBm	
P0.5dB	23dBm	25dBm	
Input Return Loss (ON)		15dB	
Output Return Loss (ON)		15dB	
Output Return Loss (OFF)		3dB	
Isolation (OFF)		35dB	
Switching speed (ns)		100 ns	
Control Voltages (V)		0V/-5 V	

* Specifications subject to change without notice.

ABSOLUTE MAXIMUM RATING

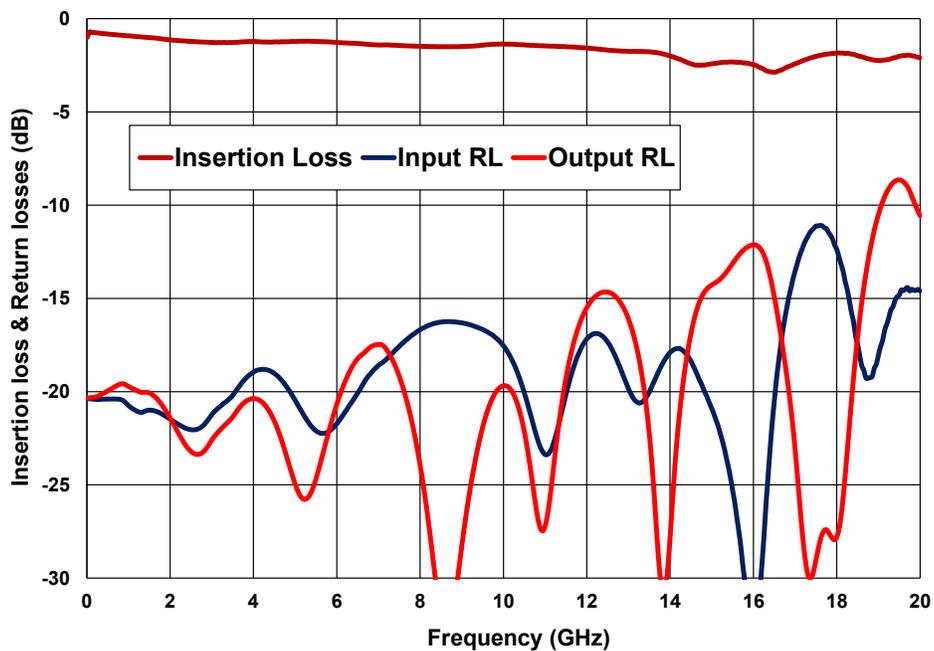
Parameters	Symbol	Rating
Control Voltage	VC (A,B)	-7V
Control Current	IC	3mA
Power dissipation	PD	150mW
RF input	RF _{in}	26 dBm
Channel temperature	T _{ch}	175°C
Operating temperature	T _{op}	-55°C to +85°C
Storage temperature	T _{sto}	-55°C to +135°C

FUNCTION TABLE

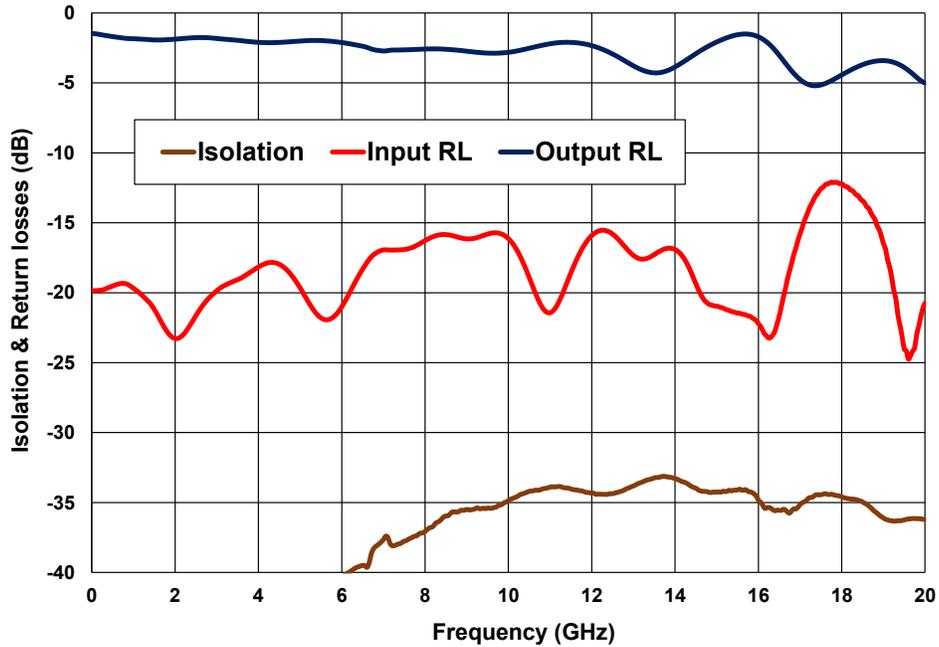
Pin No.	STATE	A	B
RFC to RF1	ON	-5V	0V
RFC to RF1	ISOLATION	0V	-5V
RFC to RF2	ON	0V	-5V
RFC to RF2	ISOLATION	-5V	0V

SMALL SIGNAL DATA

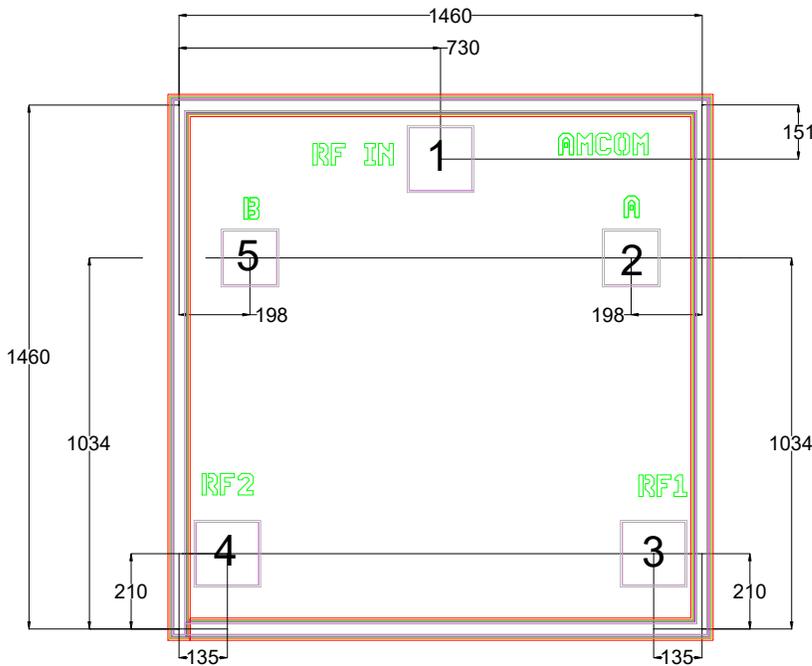
ON STATE



OFF STATE



CHIP OUTLINE



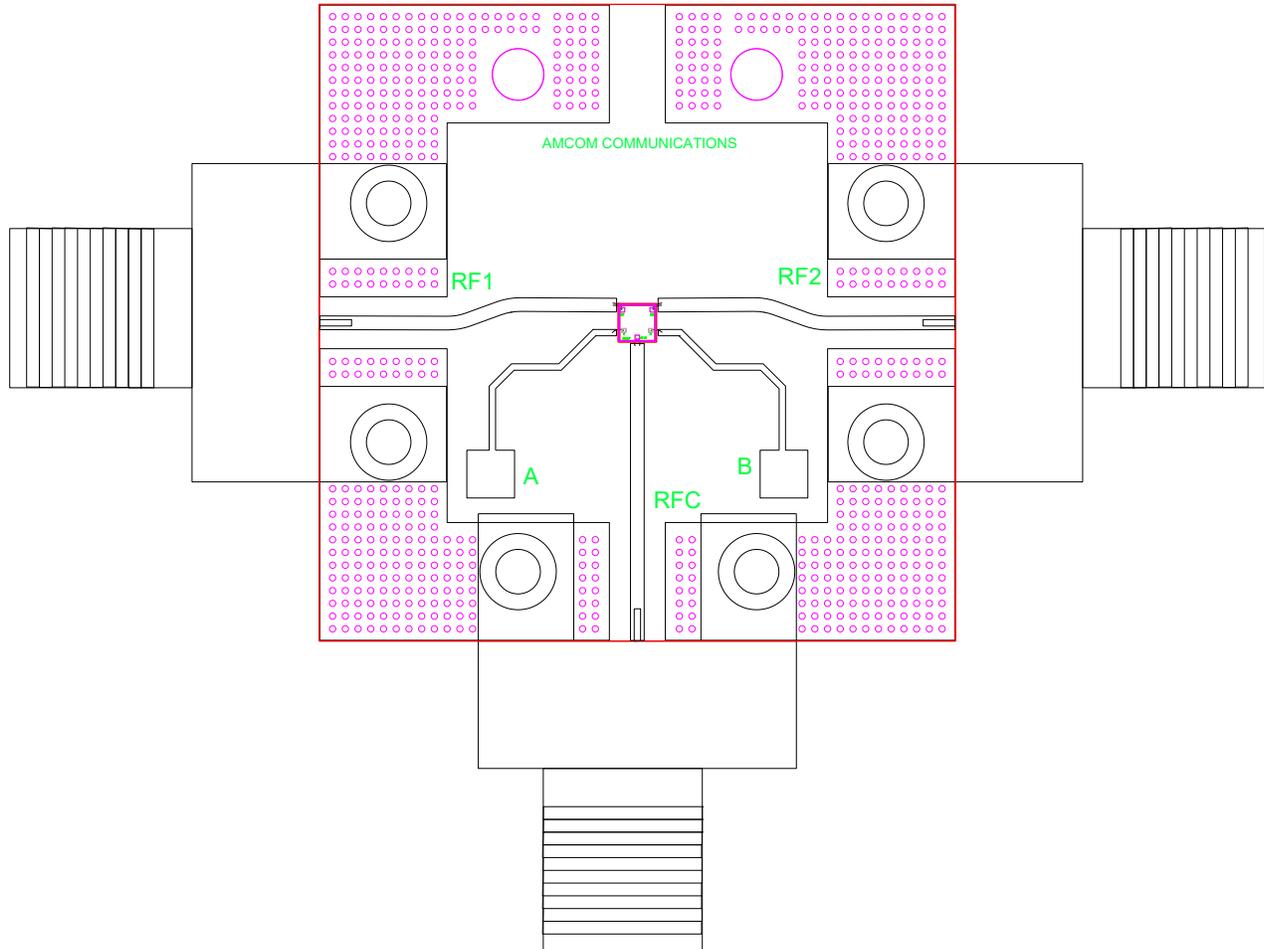
PIN LAYOUT

Pin No.	Function	Bias
1	RF IN	-
2	A	-5V/0V
3	RF1	-
4	RF2	-
5	B	-5V/0V

Notes:

- Dimensions are in microns
- Pads 1,4 and 3 are 180 x 180
- Pads 2 and 5 are 150 x 150
- Die thickness is 4 mils

CHIP TEST CIRCUIT



Important Notes:

- 1- MMIC mounted on a carrier cut out area of the EVB
- 2- Board is RO4350 10 mils thick
- 3- Bond wires should be as short as possible
- 4- The data shown previously at the reference of the chip (Connectors and microstrip line effect de- imbedded)