

V1.0.0 GaAs MMIC FET SPST Absorptive Switch DC-20GHz

Features

FET SPST Absorptive design
 Frequency: DC-20GHz

Isolation: 50dB TypicalInsertion Loss: 1.0dB TypicalControl Voltage: 0/-5V

Switching Speed: 10ns Typical
Die Size: 1.55 x 0.95 x 0.1 mm

Typical Applications

- Voltage control
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

Electrical Specifications

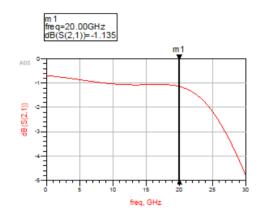
TA = +25°C, VCTL=0/-5V

Parameters	Min.	Тур.	Max.	Units
Frequency	DC		20	GHz
Insertion Loss		1.0		dB
Isolation		50		dB
Input Return Loss		-17		dB
Output Return Loss		-17		dB
P1dB - Output 1dB Compression		25		dBm
IIP3-Input Third Order Intercept		-		dBm
Switching Speed		10		ns

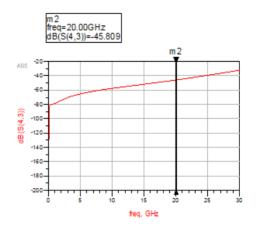


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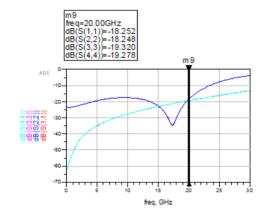
Insertion Loss vs. Frequency



Isolation vs. Frequency



Return Loss vs. Frequency

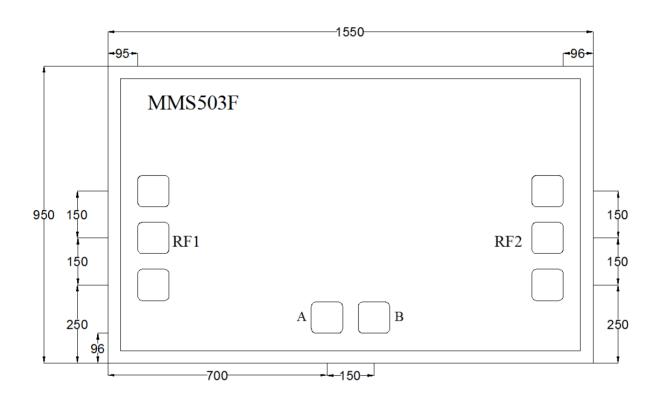




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Outline Drawing:

All Dimensions in μm



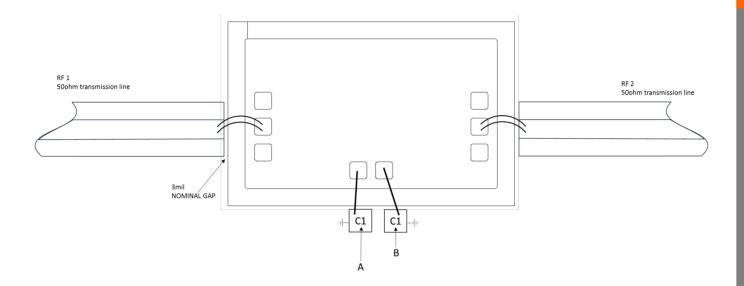
Truth Table

Control Voltage		State	
А	В	RF1 to RF2	
-5V	0V	ON	
0V	-5V	OFF	



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Assembly Drawing



Notes:

1. Die thickness:100µm

2. Typical bond pad is $100*100\mu m^2$

3. Bond pad mentalization: Gold

4. Backside metallization: Gold

5. Backside of the die (GND)

6. No connection required for unlabeled bond pads

Item	Description
C1	39pF Capacitor Example: Skyworks Part: SC10002430

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