



### Features

- FET SP2T Absorptive design
- Frequency: DC-20GHz
- Isolation: 45dB Typical
- Insertion Loss: 2.0dB Typical
- Control Voltage: 0/-5V
- Switching Speed: 10ns Typical
- Die Size: 1.55 x 1.4 x 0.1 mm

### Typical Applications

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

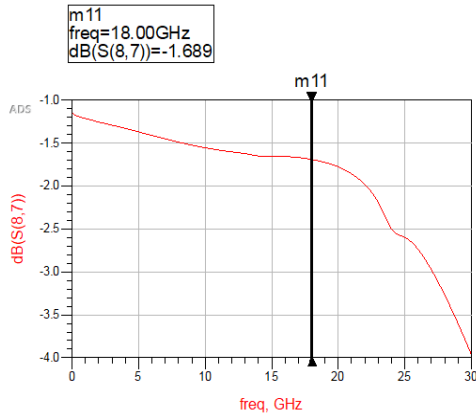
### Electrical Specifications

TA = +25°C, VCTL=0/-5V

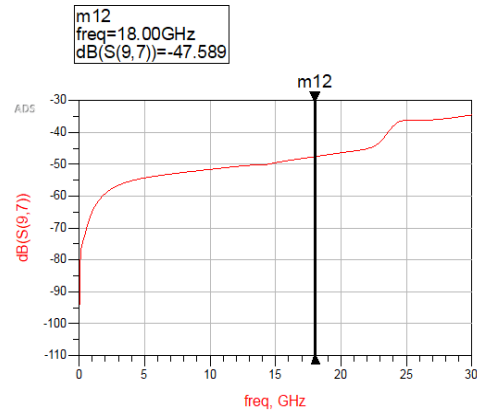
Parameters	Min.	Typ.	Max.	Units
Frequency	DC		20	GHz
Insertion Loss		2.0	2.5	dB
Isolation	40	45		dB
Input VSWR			1.5	:1
Output VSWR			1.5	:1
P1dB - Output 1dB Compression	20	23		dBm
IIP3-Input Third Order Intercept		-		dBm
Switching Speed		10		ns



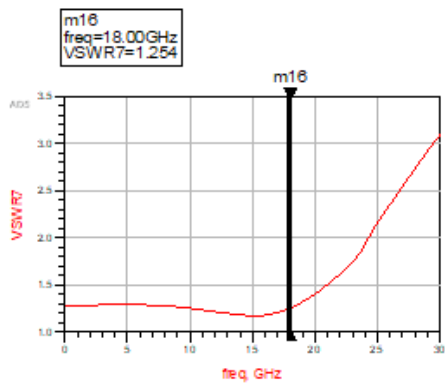
### Insertion Loss vs. Frequency



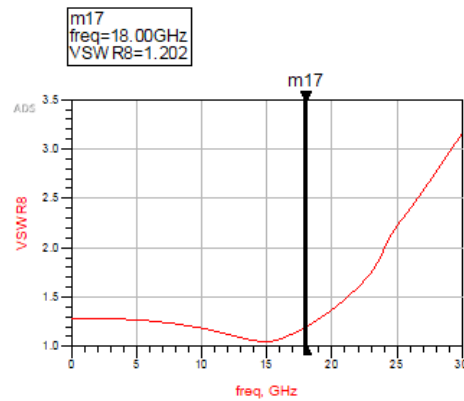
### Isolation vs. Frequency



### Input VSWR vs. Frequency

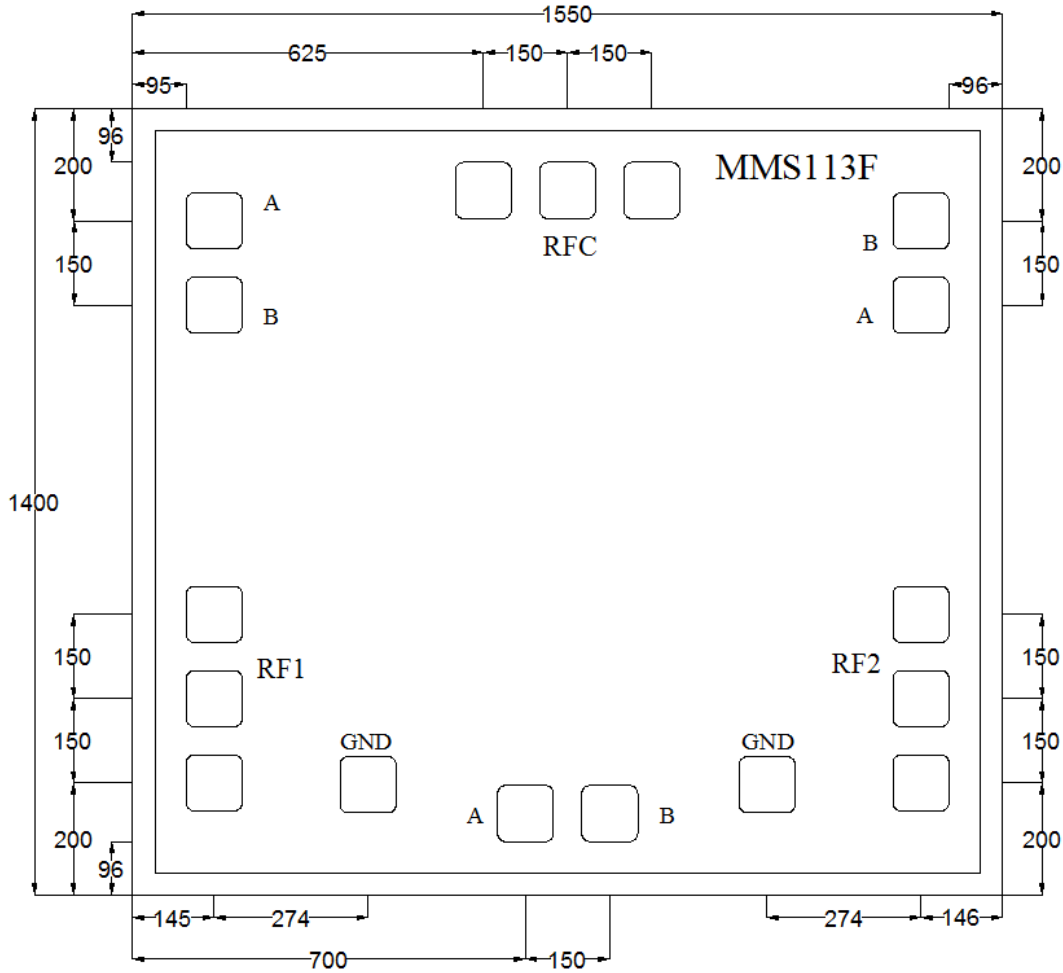


### Output VSWR vs. Frequency





**Outline Drawing:**  
All Dimensions in  $\mu\text{m}$

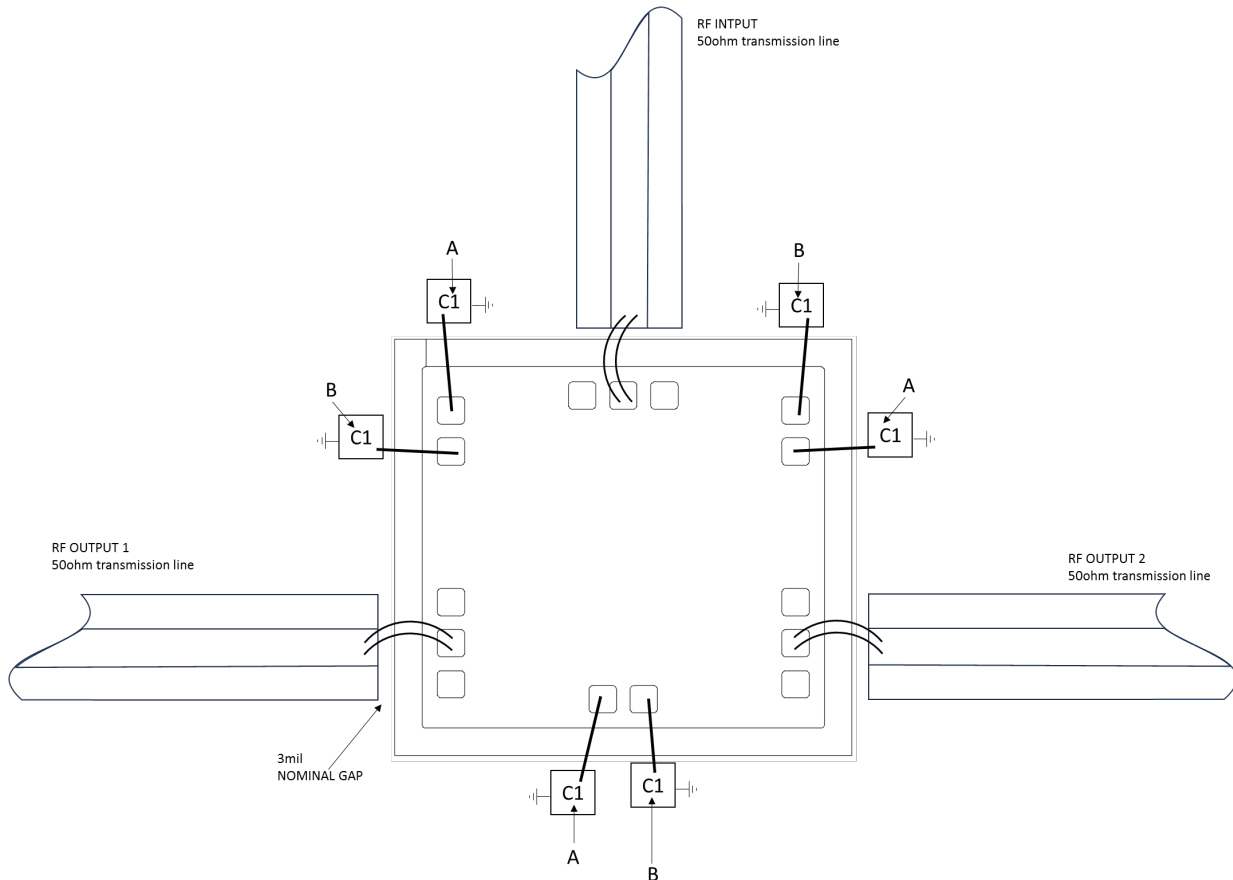


**Truth Table**

Control Voltage		State	
A	B	RF1	RF2
-5V	0V	ON	OFF
0V	-5V	OFF	ON



### Assembly Drawing



#### Notes:

1. Die thickness: 100µm
2. Typical bond pad is 100\*100µm<sup>2</sup>
3. Bond pad metallization: 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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