



Features

- FET SP2T Absorptive design
- Frequency: DC-45GHz
- Isolation: 50dB Typical
- Insertion Loss: 1.7dB Typical
- Control Voltage: 0/-5V
- Switching Speed: 10ns Typical
- Die Size: 1.75 x 1.6 x 0.1 mm

Typical Applications

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

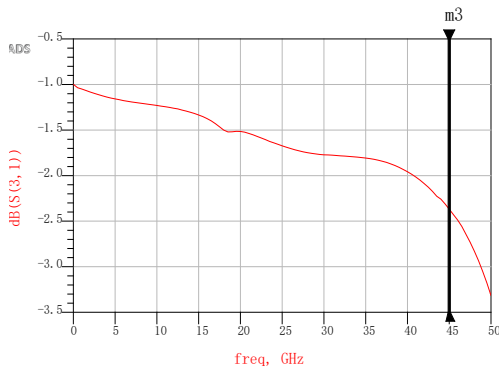
Electrical Specifications

TA = +25°C, VCTL=0/-5V

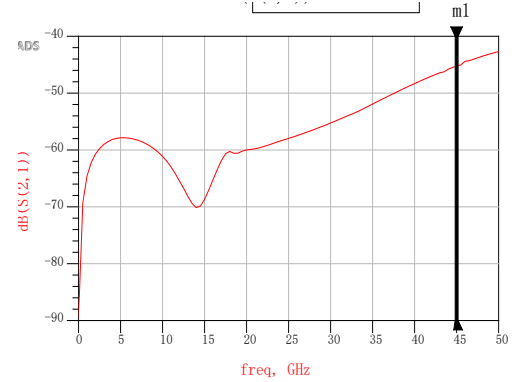
Parameters	Min.	Typ.	Max.	Units
Frequency	DC		45	GHz
Insertion Loss		1.7		dB
Isolation		50		dB
Input Return Loss		-20		dB
Output Return Loss		-21		dB
P1dB - Output 1dB Compression		21		dBm
IIP3-Input Third Order Intercept		-		dBm
Switching Speed		10		ns



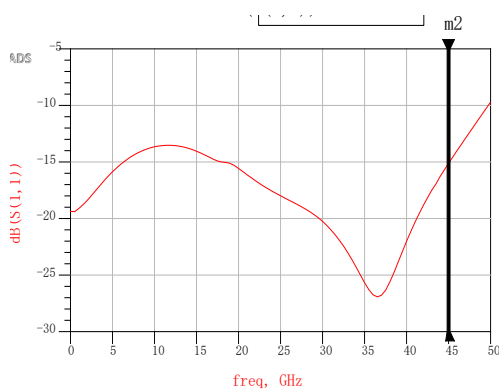
Insertion Loss vs. Frequency



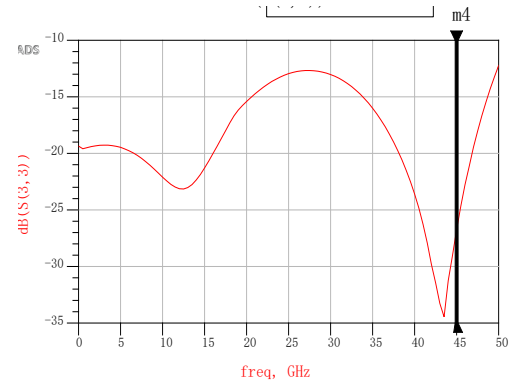
Isolation vs. Frequency



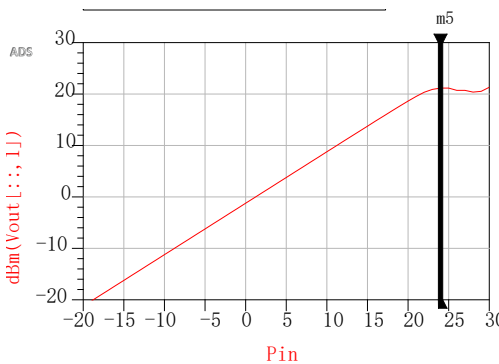
Input Return Loss vs. Frequency



Output Return Loss vs. Frequency

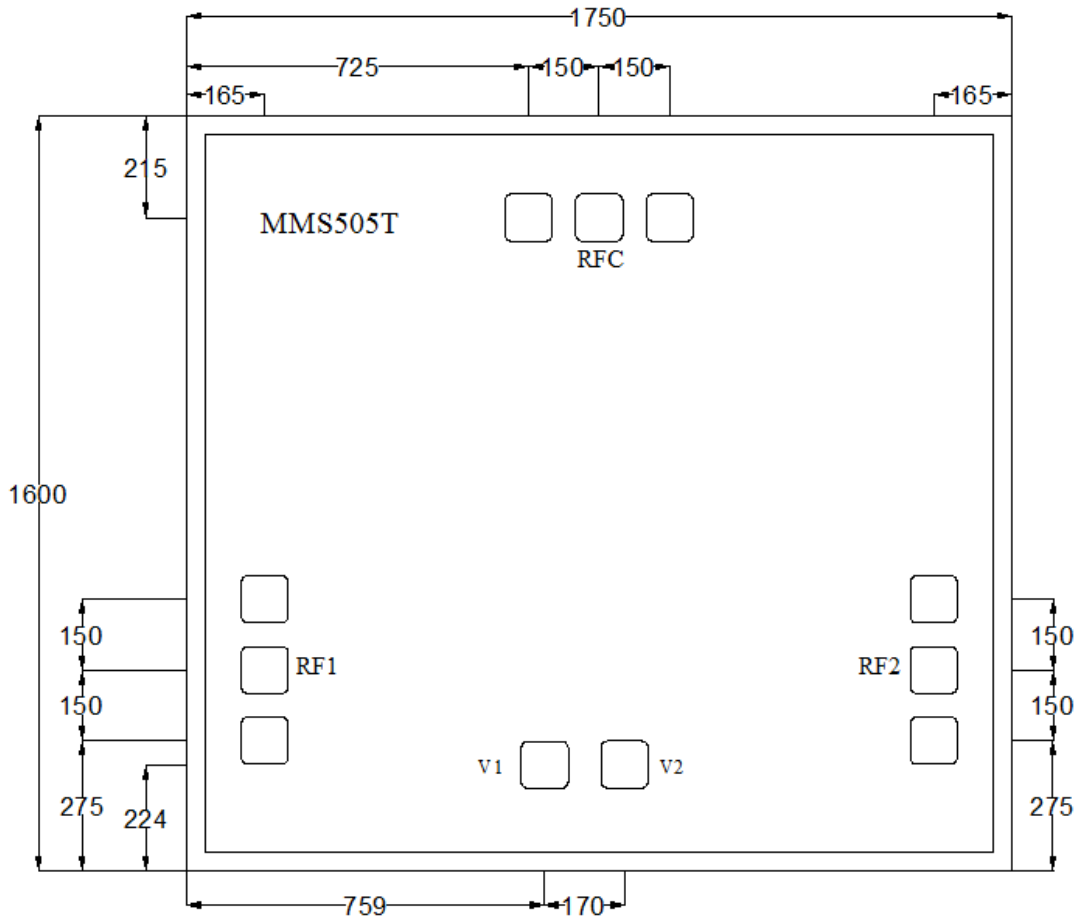


P1dB





Outline Drawing: All Dimensions in μm

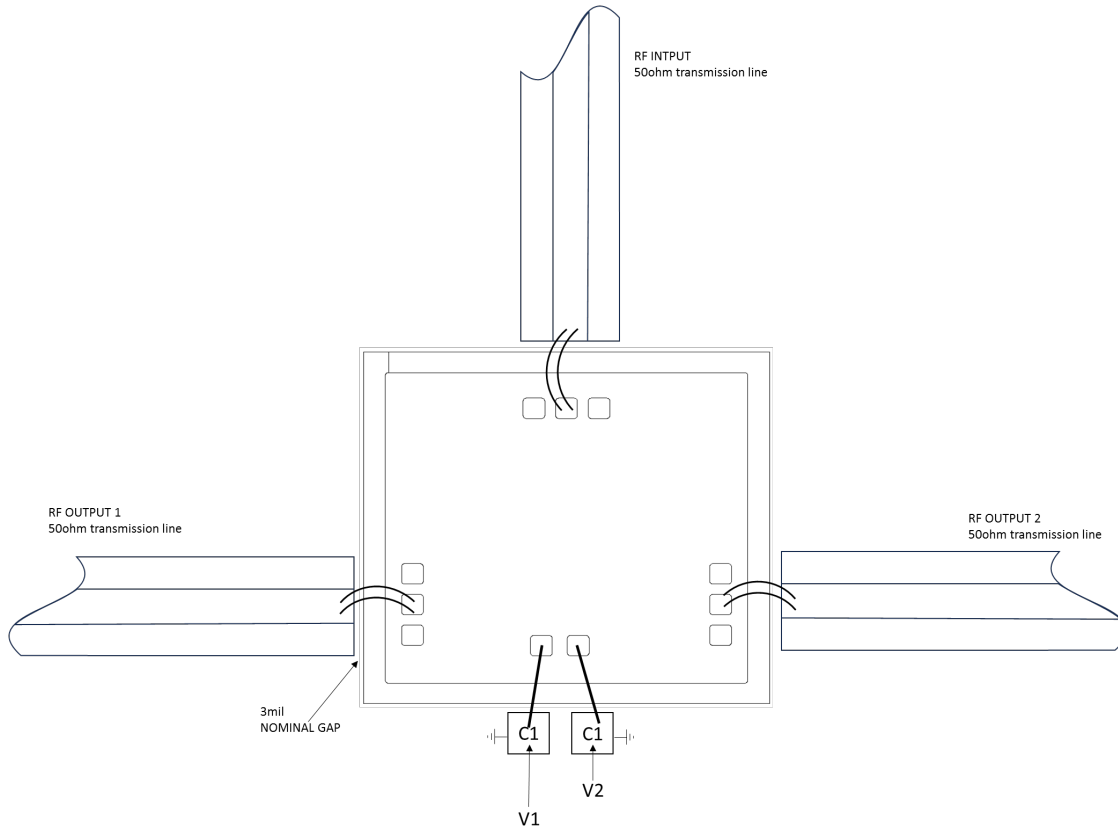


Truth Table

Control Voltage		State	
V1	V2	RFC to RF1	RF1 to RF2
-5V	0V	ON	OFF
0V	-5V	OFF	ON



Assembly Drawing



Notes:

1. Die thickness: 100µm
2. Typical bond pad is 100*100µm²
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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