



Features

- FET SPST Absorptive design
- Frequency: DC-40GHz
- Isolation: 52dB Typical
- Insertion Loss: 1.8dB Typical
- Control Voltage: 0/-5V
- Switching Speed: 10ns Typical
- Die Size: 1.75 x 0.95 x 0.1 mm

Typical Applications

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

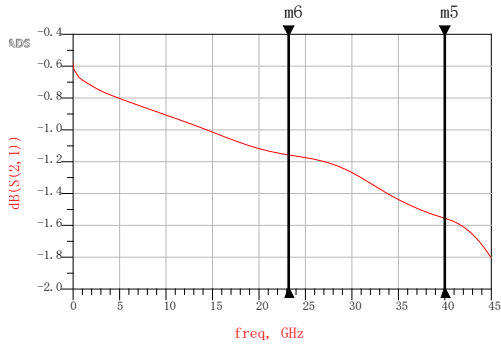
Electrical Specifications

TA = +25°C, VCTL=0/-5V

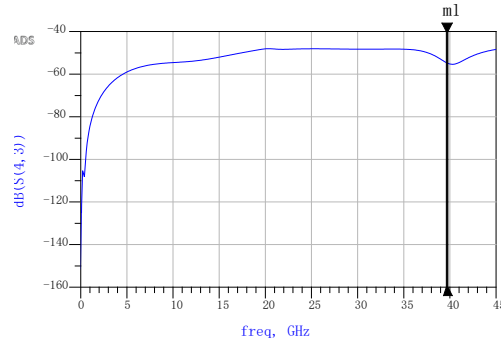
| Parameters | Min. | Typ. | Max. | Units |
|----------------------------------|------|------|------|-------|
| Frequency | DC | | 40 | GHz |
| Insertion Loss | | 1.8 | | dB |
| Isolation | | 52 | | dB |
| Input Return Loss | | -21 | | dB |
| Output Return Loss | | -20 | | dB |
| P1dB - Output 1dB Compression | | 23 | | dBm |
| IIP3-Input Third Order Intercept | | - | | dBm |
| Switching Speed | | 10 | | ns |



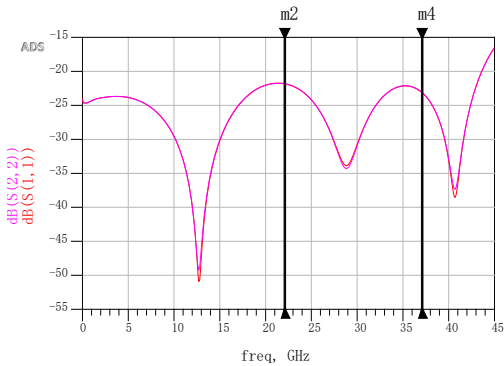
Insertion Loss vs. Frequency



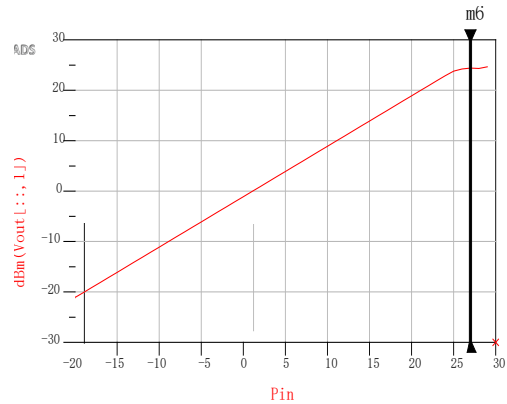
Isolation vs. Frequency



Return Loss vs. Frequency

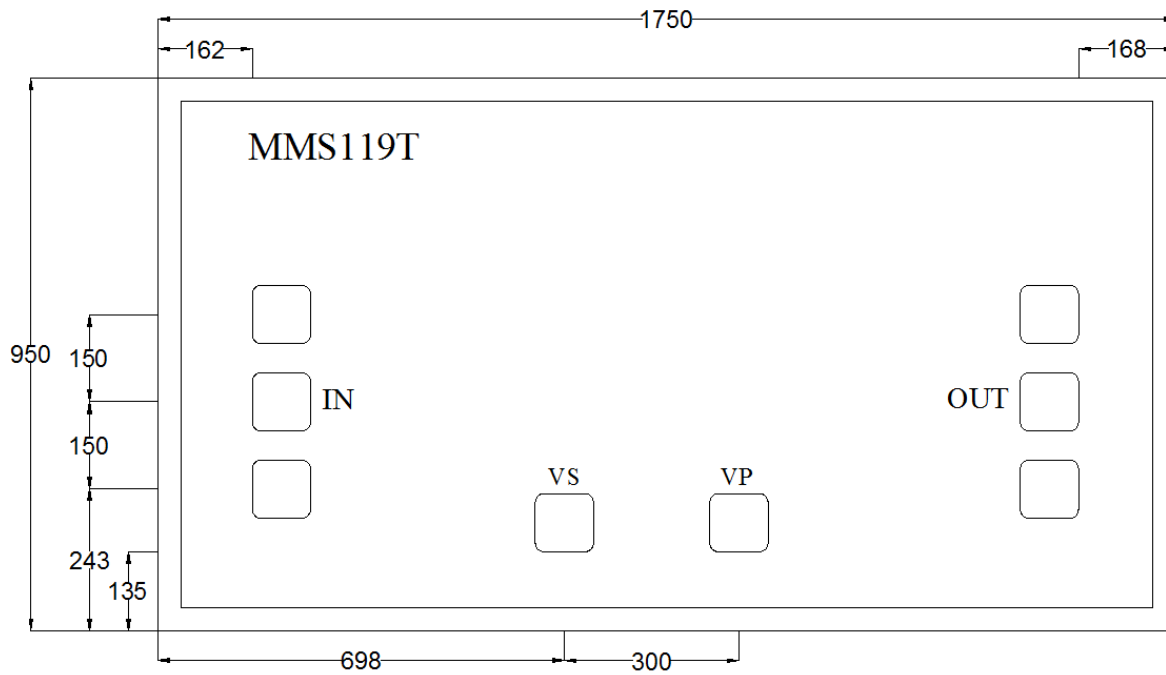


P1dB





Outline Drawing: All Dimensions in μm

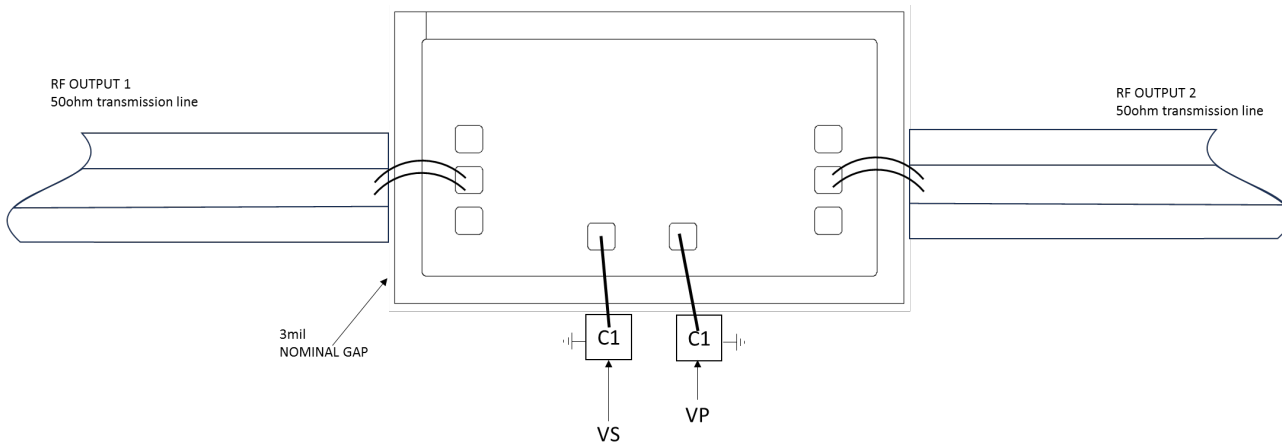


Truth Table

| Control Voltage | | State |
|-----------------|-----|-------|
| VS | VP | RF |
| 0V | -5V | ON |
| -5V | 0V | OFF |



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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