



SPM3255

Single Power Supply Operation RF Switch MMIC

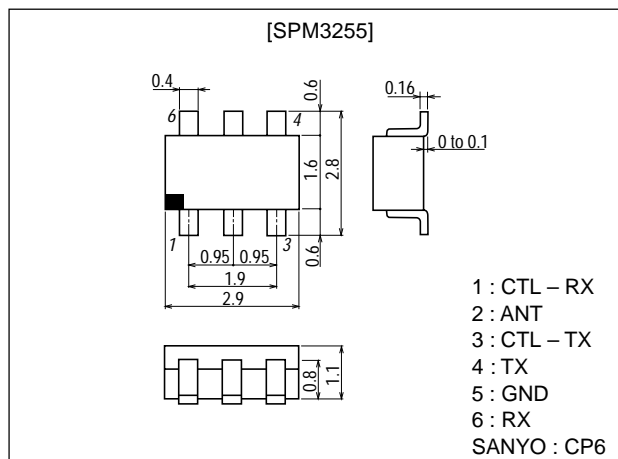
Features

- Control voltage +3 / 0V.
- Mini molded package.
- Low insertion loss, high linearity.

Package Dimensions

unit:mm

1273



Specifications

Absolute Maximum Ratings at Ta = 25°C

| Parameter | Symbol | Conditions | Ratings | Unit |
|-----------------------|------------------|------------|-------------|------|
| Control Voltage | V _{CTL} | | 5 | V |
| Storage Temperature | T _{stg} | | -55 to +150 | °C |
| Operating Temperature | T _{opr} | | -20 to +70 | °C |

Electrical Characteristics at Ta = 25°C

| Parameter | Symbol | Conditions (Control voltage + 3 / 0V) | Ratings | | | Unit |
|-----------------|--------------------|--|---------|-----|-----|------|
| | | | min | typ | max | |
| Insertion Loss | TX - ANT, ANT - RX | f=810 to 1033MHz | | | 0.5 | dB |
| | TX - ANT, ANT - RX | f=1.9GHz | | 0.6 | 0.9 | dB |
| Control Current | RX, TX | f=1.9GHz | | | 50 | μA |
| Isolation | TX - ANT, ANT - RX | f=810 to 1033MHz | 24 | | | dB |
| | TX - ANT, ANT - RX | f=1.9GHz | 20 | 22 | | dB |
| VSWR | TX - ANT, ANT - RX | f=810 to 1033MHz | | 1.1 | 1.3 | |
| | TX - ANT, ANT - RX | f=1.9GHz | | 1.4 | 2.0 | |
| Switching Time | T _{sw} | f=810MHz to 1.9GHz | | 20 | 100 | ns |
| P1dB | TX - ANT, ANT - RX | f=810MHz to 1.9GHz | 17 | 20 | | dBm |

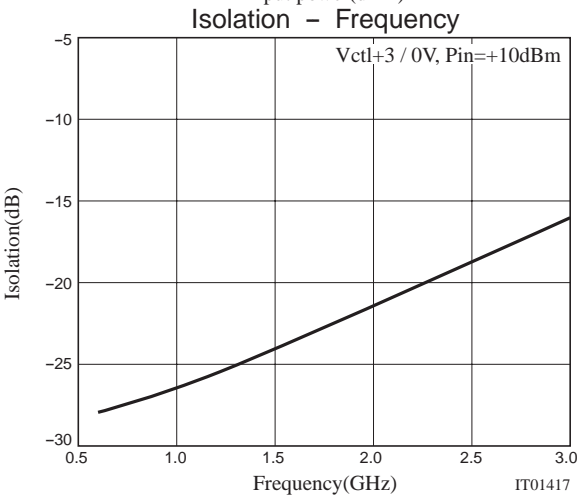
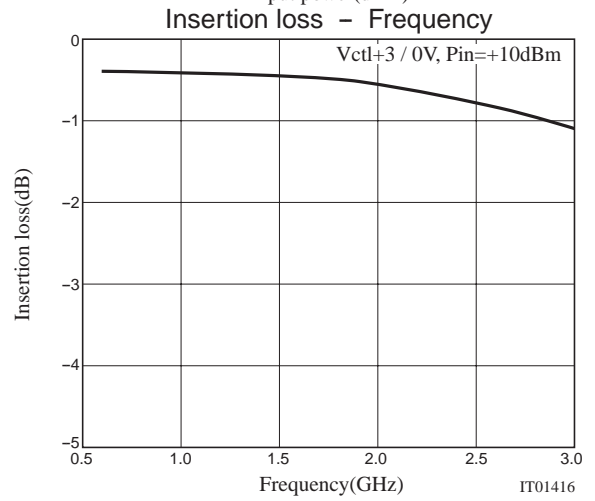
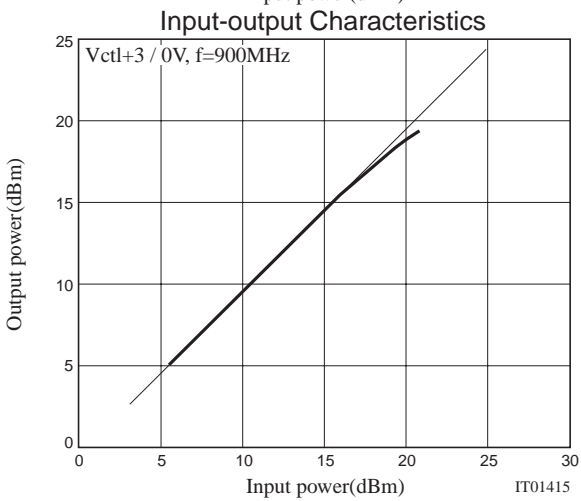
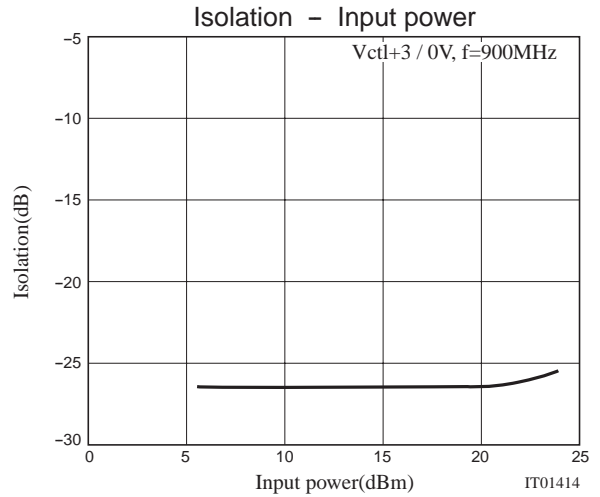
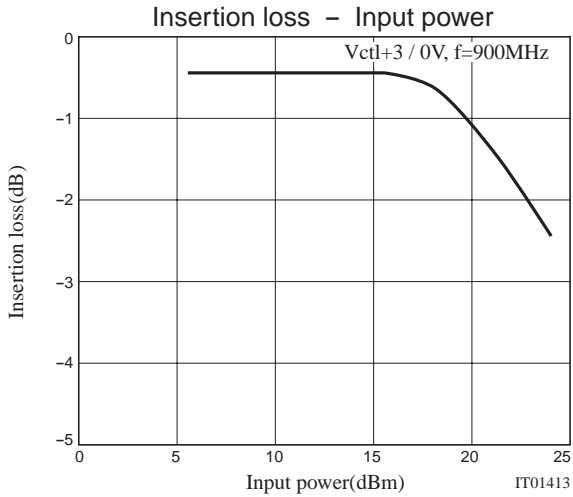
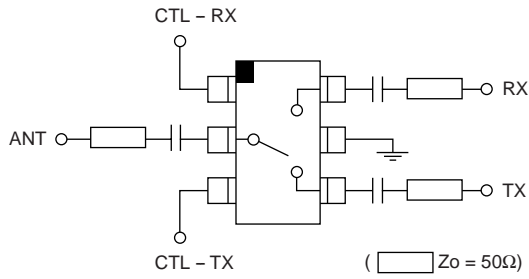
Marking : ML

| | | |
|----------|----------|----------|
| CTL - TX | CTL - RX | |
| + 3V | 0V | TX → ANT |
| 0V | + 3V | ANT → RX |

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Sample Application Circuit



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