

# SPM3214

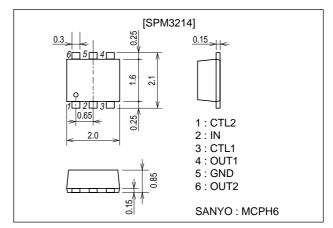
### **RF Switch MMIC**

#### **Features**

- Control voltage: +3 / 0V.
- · MCPH6 package.
- · Low insertion loss.
- · High isolation.

### **Package Dimensions**

unit : mm 1309



## **Specifications**

**Absolute Maximum Ratings** at Ta=25°C

| Parameter             | Symbol | Ratings     | Unit |
|-----------------------|--------|-------------|------|
| Control Voltage       | VCTL   | 5.0         | V    |
| Power Dissipation     | PD     | 150         | mW   |
| Storage Temperature   | Tstg   | -55 to +150 | °C   |
| Operating Temperature | Topr   | -20 to +70  | °C   |

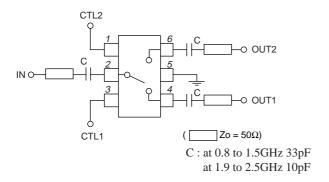
### Electrical Characteristics at Ta=25°C, Control Voltage 1, 2:0/+3V

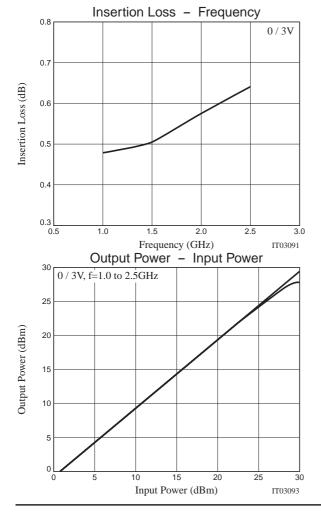
| Parameter           | Conditions       |                  | Rating |      |      | Unit  |
|---------------------|------------------|------------------|--------|------|------|-------|
| Faianietei          |                  |                  | min    | typ  | max  | Offic |
| Insertion Loss      | IN-OUT1, IN-OUT2 | f=1GHz           |        | 0.55 | 0.85 | dB    |
|                     |                  | f=2GHz           |        | 0.6  | 0.9  | dB    |
|                     |                  | f=2.5GHz         |        | 0.65 | 0.95 | dB    |
| Isolation           | IN-OUT1, IN-OUT2 | f=1GHz           | 21     | 24   |      | dB    |
|                     |                  | f=2GHz           | 17     | 20   |      | dB    |
|                     |                  | f=2.5GHz         | 15     | 18   |      | dB    |
| VSWR                | IN-OUT1, IN-OUT2 | f=1GHz to 2.5GHz |        | 1.1  | 1.5  |       |
| Switching Time      |                  | f=1GHz to 2.5GHz |        | 20   | 100  | ns    |
| P <sub>IN</sub> 1dB | IN-OUT1, IN-OUT2 | f=1GHz to 2.5GHz | 26     | 30   |      | dBm   |

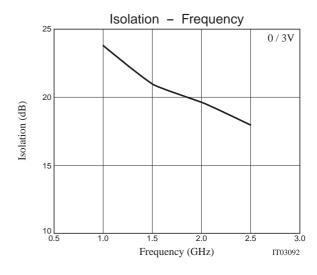
| CTL1 | CTL2 |           |
|------|------|-----------|
| +3V  | 0V   | IN – OUT1 |
| 0    | +3V  | IN – OUT2 |

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## **Application Circuit**







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