

# **SPM3216**

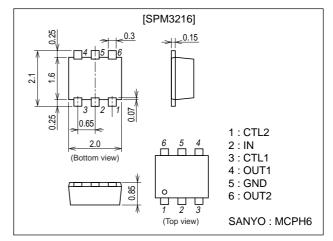
# Wide-Band Switch MMIC Operating with Single Power Supply

#### **Features**

- Control voltage: +3 / 0V.
- · Small package (MCPH6).
- · High isolation.
- · Low Insertion loss.

#### **Package Dimensions**

unit : mm 1309A



## **Specifications**

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	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 +85	°C

#### **Electrical Characteristics** at $Ta=25^{\circ}C$ Control Voltage 1, 2:0/+3V

Parameter	Conditions		Rating			Unit
i didilietei			min	typ	max	
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	19	22		dB
		f=2GHz	15	18		dB
		f=2.5GHz	13	16		dB

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		CTL2				
		+3V		0V		
CTL1 +3V	. 2\/	IN —≎	o— OUT1	IN —	OUT1 —o	
	IIV —0	○— OUT2	IIV —0-	○— OUT2		
	0\/	0V IN —∞	o— OUT1	IN ──	o— OUT1	
	UV		OUT2		○— OUT2	

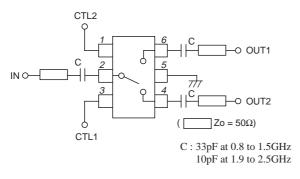
Marking : RH

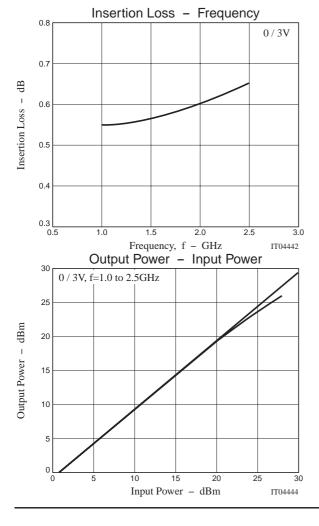
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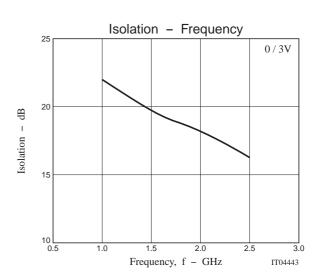
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Parameter	Conditions		Rating			Unit
			min	typ	max	]
VSWR	IN-OUT1, IN-OUT2	f=1GHz to 2.5GHz		1.1	1.5	
Switching Time		f=1GHz to 2.5GHz		20	100	ns
P <sub>IN</sub> 1dB	IN-OUT1, IN-OUT2	f=1GHz to 2.5GHz	24	28		dBm

### **Application Circuit**







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