![Mountain Microwave logo]

Focus on the future

Mountain Microwave

Reflective Pin Diode Switch
MM-RSW-020040-SP4T
2.0-4.0 GHz, SP4T

General Description:

MM-RSW-020040-SP4T is an reflective, single pole, four throw pin diode switch that operates over the 2.0 GHz to 4.0 GHz Frequency range. This model offers 65 dB Typical isolation, 50 ns typical switching speeds, and is outfitted with removable SMA connectors.

Features:

- Ultra Wide Band: 2.0-4.0GHz
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- TTL compatible driver include
- Unconditionally stable

Applications:

- 5G Systems
- Radar Systems
- Communication Systems
- Automatic Test Equipment
- Switching Network

Electrical Specifications (23°C):

Parameter	Value			Units
	Min	Typ	Max	
Frequency Range	2.0		4.0	GHz
Insertion Loss		1.2	1.5	dB
Isolation	60	65		dB
Input VSWR		1.3	1.5	:1
Output VSWR		1.3	1.5	:1
Switch Speed		50	100	ns
Power Handling			27	dBm
Bias Voltage		± 5		VDC
Bias Current		150/50		mA
Control Logic TTL		0/+5		V

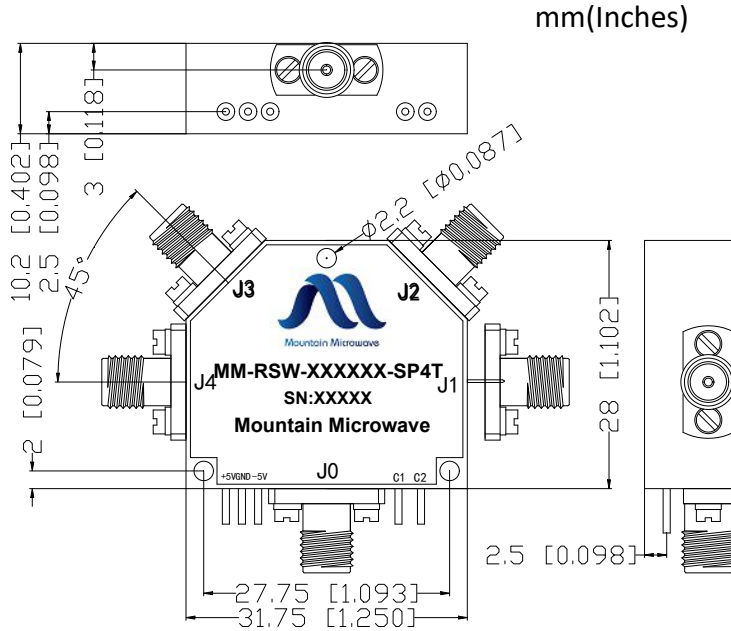## Absolute Maximum Ratings:

Condition	Value
DC Voltage	+6 V
Maximum Input Power(CW)	+27 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Mechanical Specifications:

Parameter	Value
Length	50 mm
Width	60 mm
Height	12 mm
RF Connector	2.92mm Female

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Outline Drawing:

mm(Inches)

Truth Table		
TTL Control Input		**Signal Path State**
C2	**C1**	
0	0	J0-J1
0	1	J0-J2
1	0	J0-J3
1	1	J0-J4

Environmental Conditions:

Parameter	Standard	Description
Operational Temperature		-45°C~+85°C
Storage Temperature		-55°C~+125°C
Random Vibration	MIL-STD-883K, Method 2026, Cond. IB	50 - 2000 Hz, 7.3 Grms
Humidity	MIL-STD-202, Method 103B, Cond. B	100% RH at 35c, 95%RH at 40°C
Altitude	MIL-STD-883K, Method 1001, Cond. C	50,000 feet

Caution:

• Exceeding absolute maximum ratings shown will damage the device.
• The device is static sensitive. Always follow ESD rules when working with the device.