

**DESCRIPTION**

NanoMount™ is a self contained surface mountable PIN diode matrix consisting of a number of our unique patented Silicon MMSM™ PIN devices. These models offer configurations which emulate “transfer,” “diversity”, “transmit/receive”, and single pole double throw (SPDT) switching functions.

The new NanoMount technology creates a wide-bandwidth, high-power solution with outstanding isolation, insertion loss and power handling capabilities. All on easy-to-use tape and reel packaging.

**IMPORTANT:** For the most current data, consult MICROSEMI's website: <http://www.microsemi.com>

**APPLICATIONS/BENEFITS**

- 0.1 to 6.0GHz Bandwidth
- 100x100mm Footprint
- 10W Power Handling
- Many Wiring Options Possible
- Low Current Consumption
- Low Distortion Silicon MMSM PINs
- Superb Consistency vs. Flatpack Or Lead Frame Packages
- Superior Performance vs. GaAs MESFET Designs

**APPLICATIONS/BENEFITS**

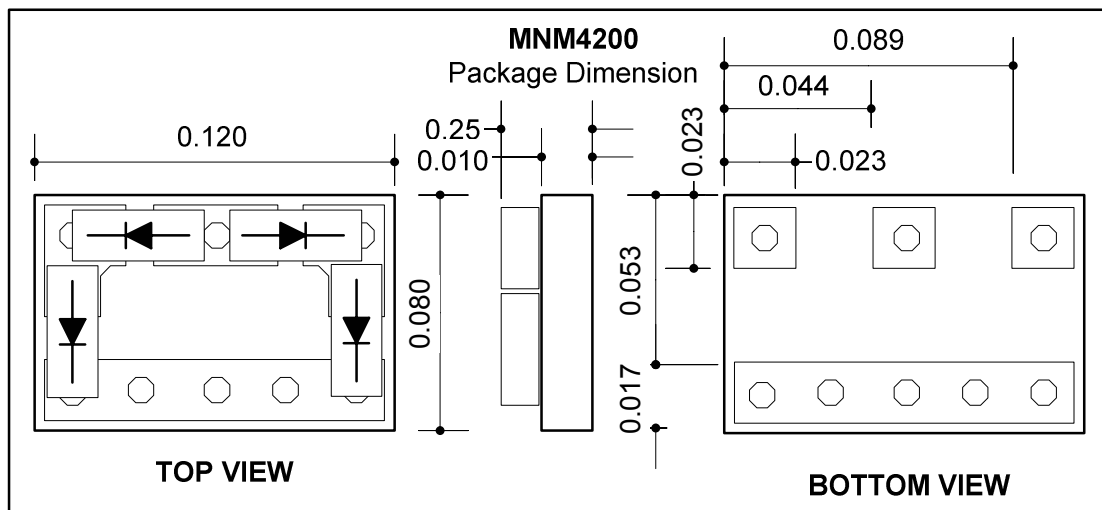
- WLAN 5GHz to 6GHz
- SPDT Switching
- “Transfer” Switching
- “Diversity” Switching
- User Defined Functionality
- Ideal For Wide Bandwidth Applications

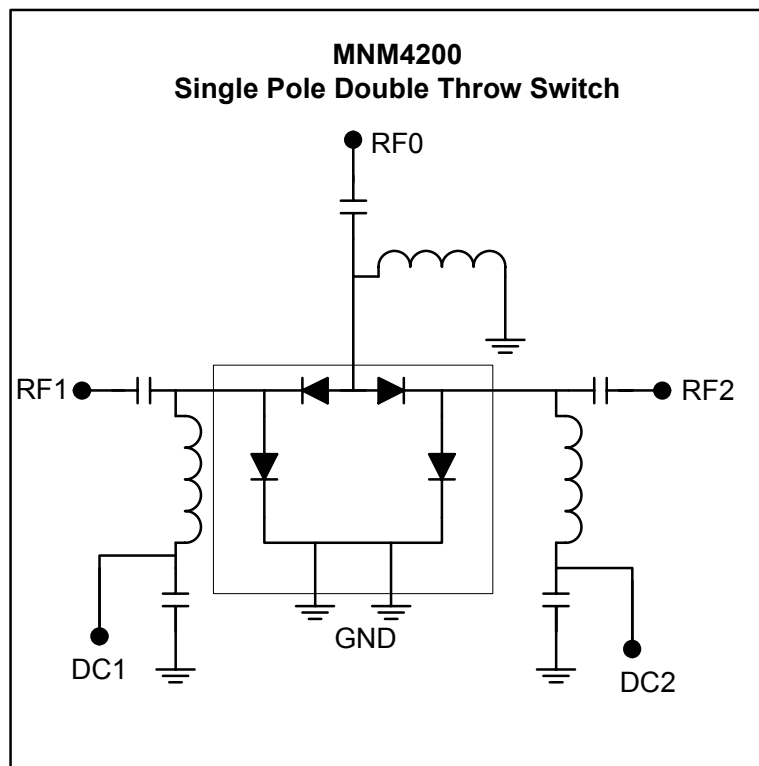
**PRODUCT HIGHLIGHT**


**MNM4200 SERIES / SHUNT SPDT SWITCH\***

| Isolation     | Insertion Loss | VSWR                                   | Power Handling             |
|---------------|----------------|--|----------------------------|
| 60dB @ 0.1GHz | 0.3dB @ 0.1GHz | 2.0:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 45dB @ 1.0GHz | 0.4dB @ 1.0GHz | 2.0:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 40dB @ 2.0GHz | 0.5dB @ 2.0GHz | 2.0:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 30dB @ 4.0GHz | 0.7dB @ 4.0GHz | 2.0:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 25dB @ 5.0GHz | 1.0dB @ 5.0GHz | 2.0:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 25dB @ 6.0GHz | 1.2dB @ 6.0GHz | 2.0:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |

*\*Typical performance at 5mA*

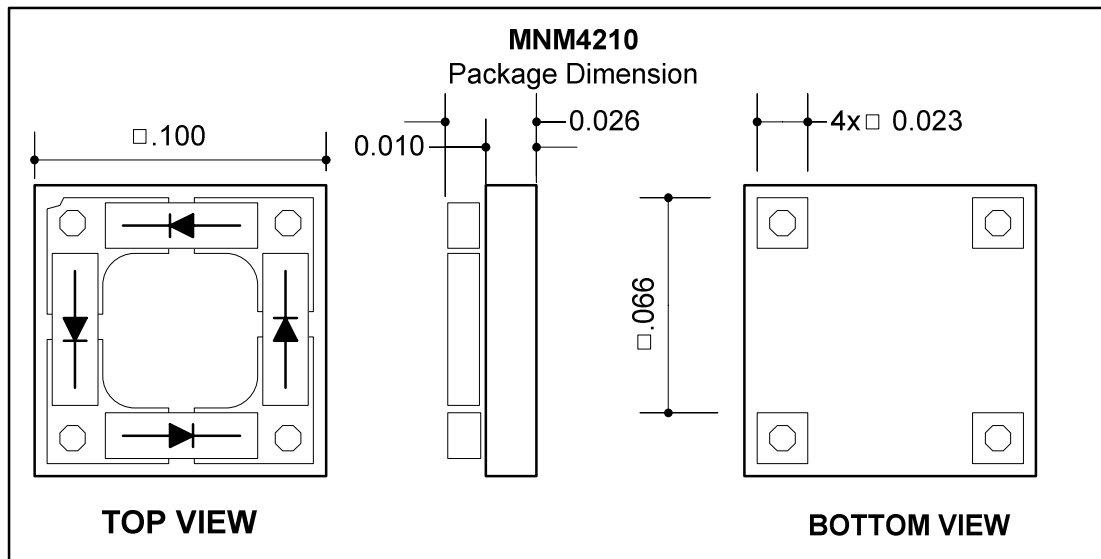
**MNM4200 SERIES / PACKAGE DIMENSION**


**MNM4200 SERIES: SINGLE POLE DOUBLE THROW SWITCH**

**MNM4210: TRANSFER/DUAL SWITCH\***

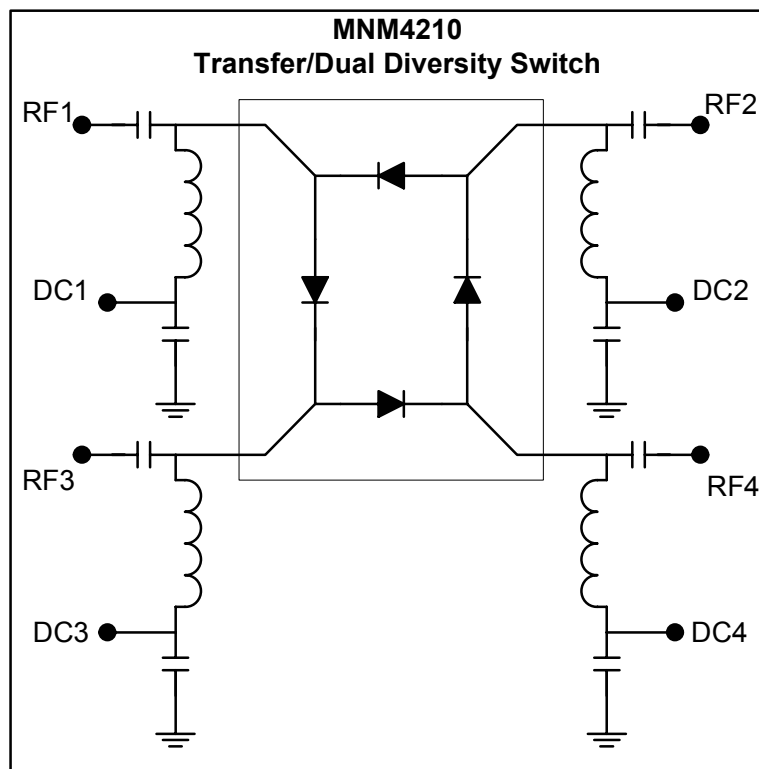
| Isolation     | Insertion Loss | VSWR                                   | Power Handling             |
|---------------|----------------|--|----------------------------|
| 40dB @ 0.1GHz | 0.2dB @ 0.1GHz | 1.5:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 30dB @ 1.0GHz | 0.3dB @ 1.0GHz | 1.5:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 25dB @ 2.0GHz | 0.3dB @ 2.0GHz | 1.5:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 15dB @ 4.0GHz | 0.5dB @ 4.0GHz | 1.5:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 15dB @ 5.0GHz | 0.5dB @ 5.0GHz | 1.5:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 15dB @ 6.0GHz | 1.0dB @ 6.0GHz | 1.5:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |

*\*Typical performance at 5mA*

**MNM4210 SERIES / PACKAGE DIMENSION**



**MNM4210 SERIES: TRANSFER/DUAL SWITCH\***

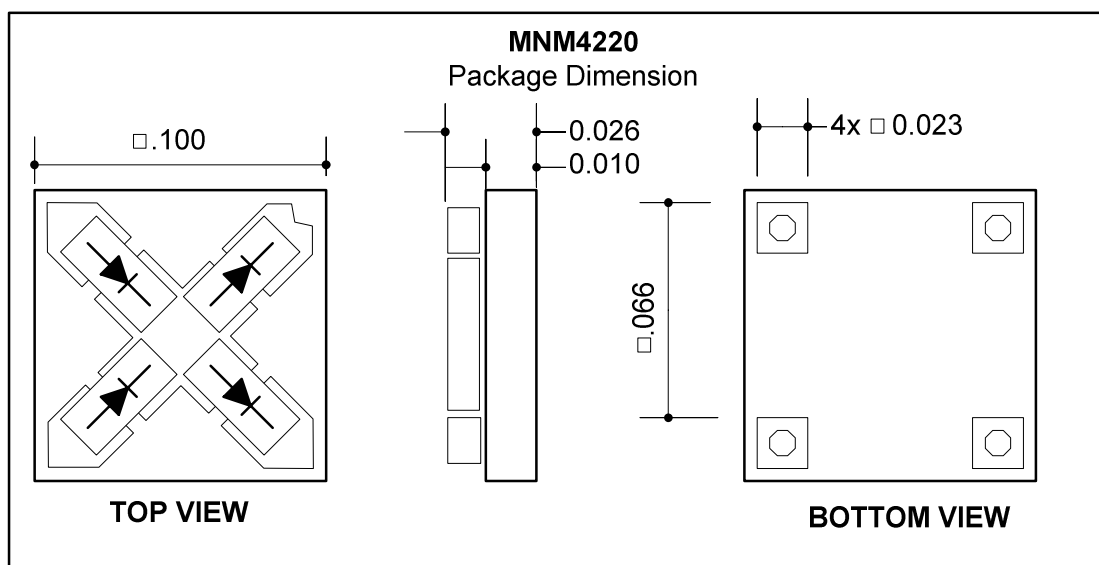


**MNM4220: JUNCTION/DIVERSITY SWITCH\***

| Isolation     | Insertion Loss | VSWR                                   | Power Handling             |
|---------------|----------------|--|----------------------------|
| 40dB @ 0.1GHz | 0.2dB @ 0.1GHz | 1.5:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 30dB @ 1.0GHz | 0.3dB @ 1.0GHz | 1.5:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 25dB @ 2.0GHz | 0.3dB @ 2.0GHz | 1.5:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 15dB @ 4.0GHz | 0.5dB @ 4.0GHz | 1.5:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 15dB @ 5.0GHz | 0.5dB @ 5.0GHz | 1.5:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |
| 15dB @ 6.0GHz | 1.0dB @ 6.0GHz | 1.5:1 from 0.1GHz to 6.0GHz, all ports | 10 Watts CW incident power |

*\*Typical performance at 5mA*

Note: Above typical performance is for single junction configuration. Additional isolation improvement can be obtained by using a dual junction configuration

**MNM4220 SERIES / PACKAGE DIMENSION**


**MNM4210 SERIES: JUNCTION/DIVERSITY SWITCH\***

