Waveguide Coaxial Switch

# NWCSD-75-S

DPDT, DC~18GHz, WR-75, SMA

Features:
* Low VSWR
* Low Insertion Loss
* High Isolation

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

## Electrical

| | |
|---|---|
| Frequency(Coaxial): | DC~18GHz |
| Frequency(Waveguide): | 10~15GHz |
| Current: | 1.2A@24V DC |
| Voltage: | 24±2V DC |
| Impedance: | 50Ω |

## Coaxial Switch

| Frequency range (GHz) | Insertion Loss (dB Max.) | Isolation (dB Min.) | VSWR (Max.) |
|---|---|---|---|
| DC-1 | 0.05 | 80 | 1.1 |
| 1-2 | 0.1 | 70 | 1.15 |
| 2-6.5 | 0.25 | 60 | 1.25 |
| 6.5-11 | 0.3 | 60 | 1.3 |
| 11-15 | 0.35 | 50 | 1.35 |
| 15-18 | 0.5 | 50 | 1.5 |

## Waveguide Switch

| Frequency range (GHz) | Insertion Loss (dB Max.) | Isolation (dB min.) | VSWR (Max.) |
|---|---|---|---|
| 10-15 | 0.05 | 60 | 1.08 |

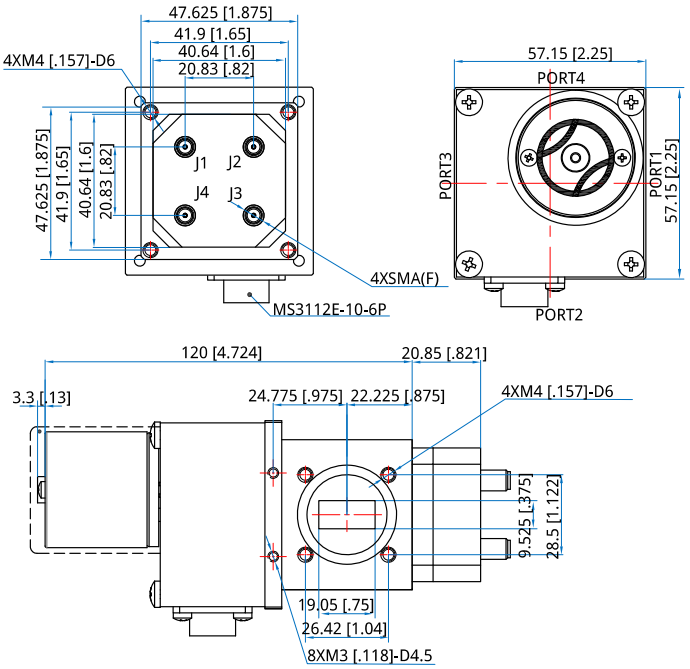
## Mechanical

| | |
|---|---|
| Coaxial Switch Interface: | SMA |
| Waveguide Switch Interface: | WR-75 |
| Switching Time: | 80mS |
| Operation Life: | 0.1M Cycles |

## Environmental

| | |
|---|---|
| Operating Temperature: | -40~+85℃ |
| Extended Temperature: | -55~+85℃ |
| Non-operating temperature: | -55~+105℃ |

## Outline Drawings




Unit: mm [in]
Tolerance: ±0.2mm [±0.008in]

## Additional Options

TTL: T
Indicators: I
Extended Temperature: Z

## How To Order

NWCSD-75-S-XYZ

S: RF Connectors. SMA: S.
X: Voltage. +15V: F , +24V: K.
Y: Interface Circular connector:2.
Z: Additional Options.

Examples:
To order a Waveguide Coaxial Switch, DPDT, WR75, SMA, +24V, TTL, Indicators, specify NWCSD-75-S-K2IT.

Customization is available upon request.

## Pin Numbering

| Pin | Function | Pin | Function |
|---|---|---|---|
| A | VDC | D | Indicator1 |
| B | GND | E | Indicator (COM) |
| C | VDC | F | Indicator2 |

## Control Logic

| Position | A | B | C | RF Working Condition | | Indicator status |
|---|---|---|---|---|---|---|
| POS 1 | VDC | GND | NC | PORT1-PORT2 ON<br>PORT3-PORT4 ON | J1-J2 ON<br>J3-J4 ON | D-E ON<br>F-E OPEN |
| POS 2 | NC | GND | VDC | PORT1-PORT4 ON<br>PORT3-PORT2 ON | J1-J4 ON<br>J3-J2 ON | D-E OPEN<br>F-E ON |

## Driving Schematic Diagram