

VT180WDESMD

Waveguide Electromechanical Switch

Features:

- Full Waveguide Band Coverage
- DPDT, Optional SPDT Configuration
- Equipped with Position Indicator

Applications:

- Transmit-Receive system
- Electronic Countermeasures System
- Commercial Ground Stations



Electrical Specifications

| Parameter | Minimum | Typical | Maximum | Units |
|----------------|---------|---------|---------|-------|
| Frequency | 14.5 | | 22 | GHz |
| VSWR | | | 1.15 | |
| Insertion Loss | | | 0.2 | dB |
| Isolation | 60 | | | dB |
| Average Power | | | 300 | W |
| Peak Power | | | 20 | KW |

Mechanical Specifications

| Parameter | Specifications |
|-----------------------|-------------------------------|
| Waveguide Type | WR51 |
| Flange Type | UBR180 |
| Material | Aluminum |
| Inside Finish | Natural conductive oxidation |
| Outside Finish | Black paint with control part |
| Weight | 0.6 kg |
| Operating Temperature | -40°C~+70°C |
| Storage Temperature | -55°C~+85°C |
| Relative Humidity | 80% |
| IP Level | IP54 |

VT180WDESMD

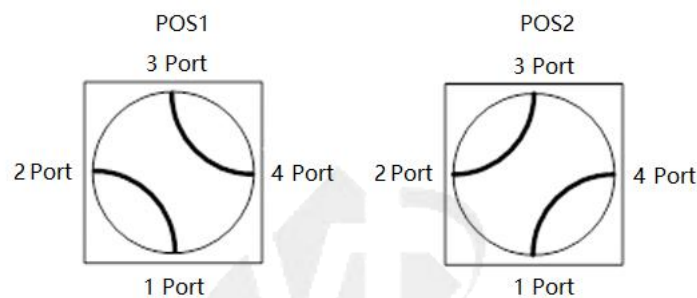
Waveguide Electromechanical Switch Control Specifications

| Parameter | Specifications |
|-----------------------|---------------------------|
| Control Mode | Electric, Manual |
| Control Connector | Y50X-0807 |
| Operating Mode | Power off protection type |
| Current | +22V ~ +32V |
| Voltage | 1A |
| Switch Time (Max) | 80ms |
| Switch Lifetime (Min) | 100,000 times |

Wiring Definition

| Pin Definition | Function | Note |
|----------------|------------|-----------------------------|
| 1 | VCC1 (24V) | VCC1 (POS1) |
| 2 | GND | |
| 3 | VCC2 (24V) | VCC2 (POS2) |
| 4 | J1 | POS1: J1 and COM conducting |
| 5 | COM | Signal common port |
| 6 | J2 | POS2: J2 and COM conducting |

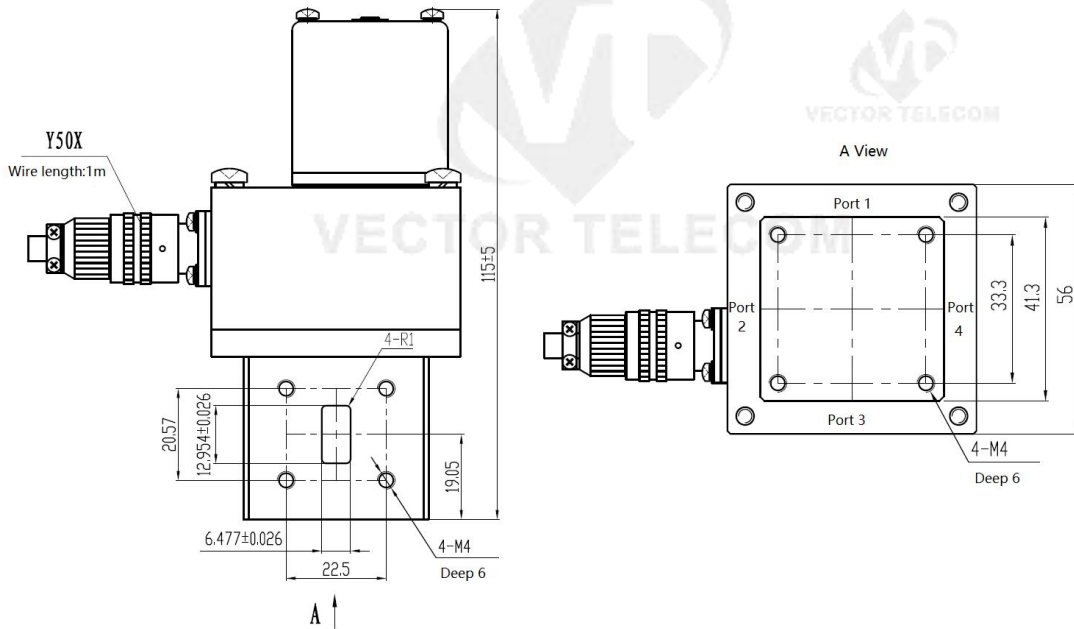
Port Status Diagram



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Outline Drawings (Unless otherwise specified, all dimensions are in millimeters)



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Revision History

| Date | Revision | Changes |
|-------------|----------|---------------|
| 09-Oct-2019 | 1 | First release |

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Email: sales@vectortele.com

www.vectortele.com