# VMCSW-DC/18-SPDT-55-28-SMAF

## FEATURES

- Broadband: DC~18GHz
- Lifecycle: Up to 2,000,000 cycles
- Excellent repeatability
- Low VSWR, low insertion loss, high isolation

## TYPICAL APPLICATIONS

- Aerospace and military
- Radar and satellite communications
- Testing
- Communications

## PRODUCT OVERVIEW

The SPDT series coaxial switch is a product line characterized by high reliability, high isolation, and long service life. It features broad operating bandwidth, low VSWR, low loss, high isolation, and high power handling capability. It is widely applicable in fields such as aerospace/military, radar/satellite communications, semiconductor chip testing, 5G/6G communications, automated test systems, and electronic measurement instruments.

## ELECTRICAL SPECIFICATIONS

SPDT, DC～18GHz, 28V, Failsafe, Terminal Post

| Frequency (GHz) | Insertion Loss (dB Max) | VSWR (Max) | Isolation (dB Min) | Average Power Handling (W) | Impedance (Ω) |
|---|---|---|---|---|---|
| DC~6 | ≤0.20 | ≤1.20 | ≥70 | ≤85 | 50 |
| 6~12 | ≤0.30 | ≤1.30 | ≥70 | ≤70 | 50 |
| 12~18 | ≤0.40 | ≤1.40 | ≥60 | ≤55 | 50 |

## CONTROL CHARACTERISTICS

| | |
|---|---|
| Control Mode (Vdc) | Voltage-driven |
| | Failsafe |
| Voltage (DC) | 28V |
| Current (mA) | ≤120mA (Dc) @20℃ |
| Control Interface | Terminal Post |

## MECHANICAL CHARACTERISTICS

| | |
|---|---|
| RF Connector | SMA-F (Female) |
| Cycles | ⩾2,000,000 |
| Switching Time (ms) | ≤15 |
| Weight | ≤70g |

## ENVIRONMENTAL CHARACTERISTICS

| | |
|---|---|
| Operating Temperature | -45°C ~ +65°C (Standard) |
| Storage Temperature | -55°C ~ +85°C |
| Moisture | 5 ~ 85% |
| Ingress Protection | IP63 |
| Shock (Unpowered) | 50G, 1/2 Sine, 11ms |
| Vibration (Powered) | 10G RMS, 20-2000Hz |

## PIN DEFINITION

| Pin Number | Definition | RF Channel |
|---|---|---|
| Pin - | GND | |
| Pin + | +12V | C-1 On |
| Unpowered | | C-2 On |

## OUTLINE DRAWING

Unit: mm