

## VMCSW-DC/18-SP4T-55-12-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 SP4T 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

SP4T, DC~18GHz, 12V, D-SUB

Frequency (GHz)	Insertion Loss (dB Max)	VSWR (Max)	Isolation (dB Min)	Average Power Handling (W)	Impedance ( $\Omega$ )
DC~6	$\leq 0.30$	$\leq 1.30$	$\geq 70$	$\leq 85$	50
6~12	$\leq 0.40$	$\leq 1.40$	$\geq 60$	$\leq 65$	50
12~18	$\leq 0.50$	$\leq 1.50$	$\geq 60$	$\leq 55$	50

### CONTROL CHARACTERISTICS

Control Mode (Vdc)	Voltage-driven
	Normally Open
Voltage (DC)	12V
Current (mA)	$\leq 290\text{mA}$ (Dc) @20°C
Control Interface	D-SUB, 2 rows 15pin Male

## MECHANICAL CHARACTERISTICS

RF Connector	SMA-F (Female)
Cycles	$\geq 2,000,000$
Switching Time (ms)	$\leq 15$
Weight	$\leq 190\text{g}$

## 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 1	+12V	C-1
Pin 2	+12V	C-2
Pin 4	+12V	C-4
Pin 5	+12V	C-5
Pin 7	GND	
Pin 3,6,8~15	N/A	

## OUTLINE DRAWING

Unit: mm

