

VMCSW-DC/6-SPDT-400-12-NF

FEATURES

- ◆ Band Width: DC~6GHz
- ◆ 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~6GHz, Failsafe, 12V, TTL, Terminal Block

Frequency (GHz)	Insertion Loss (dB Max)	VSWR (Max)	Isolation (dB Min)	Average Power Handling (W)	Impedance (Ω)
DC~2	≤ 0.2	≤ 1.20	≥ 70	≤ 600	50
2~6	≤ 0.3	≤ 1.30	≥ 70	≤ 400	50

CONTROL CHARACTERISTICS

Control Mode (Vdc)	TTL High (3.3~5Vdc, $\leq 5\text{mA}$)
	Failsafe
Voltage (DC)	12V
Current (mA)	$\leq 275\text{mA}$
Control Interface	Terminal Block

MECHANICAL CHARACTERISTICS

RF Connector	N-F (Female)
Cycles	≥2,000,000
Switching Time (ms)	≤15
Weight	≤260g

ENVIRONMENTAL CHARACTERISTICS

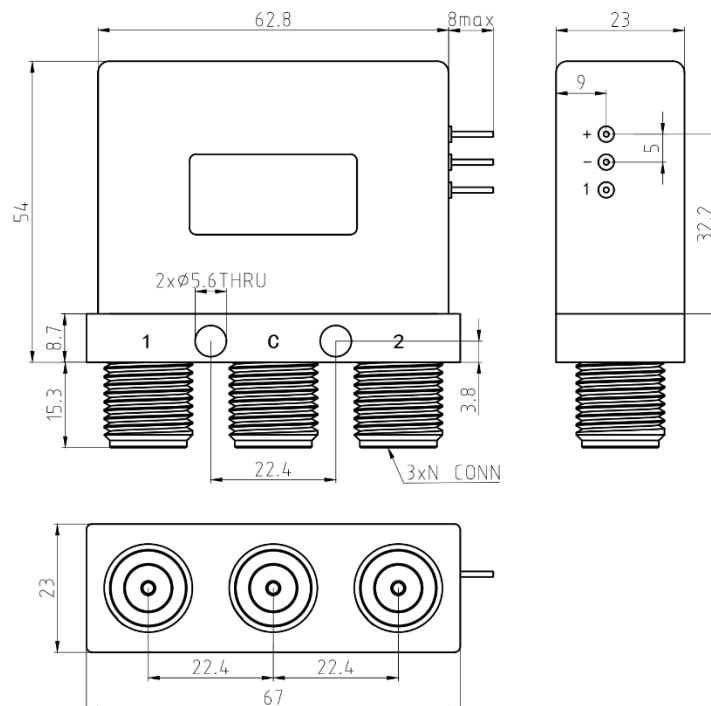
Operating Temperature	-45°C ~ +65°C (Standard)
Storage Temperature	-55°C ~ +85°C
Moisture	5 ~ 85%
Ingress Protection	IP63
Shock (Unpowered)	50G, 1/2 Sine, 11ms
Vibration (Powered)	10G RMS, 20-2000Hz

PIN DEFINITION

Pin Number	Definition	RF Channel
Pin 1	TTL High	C-1 On
Pin -	GND	
Pin +	+12V	
Unpowered or TTL Low		C-2 On

OUTLINE DRAWING

Unit: mm



IMPORTANT NOTES

1. Electrostatic Sensitive Device. Observe precautions for handling, storage, and transportation to prevent electrostatic discharge (ESD) damage.
2. Non-hermetic device. Protect from moisture and rain. Store in a dry, dust-free environment.
3. Before use, verify the input requirements for power supply and control pins. Avoid pin misconnection or exceeding rated limits.
4. The RF port is a precision female connector. Mate only with a compatible male connector. Use a torque wrench to tighten the coupling nut of the male connector.
5. Technical specifications are subject to change without notice.