

# Waveguide Switch Series-WR22

## Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	37GHz		43GHz
Insertion Loss			0.2dB
Isolation	55dB		
VSWR			1.3:1
Voltage		+24VDC	+32 VDC
Current (A)			1A
Switching Time(ms)			50
Control	TTL HI, Pulse (>50ms)		
Remote Testing Impedance	Conducting: $\leq 100\Omega$		
	Cut-off: $\geq 1000\Omega$		

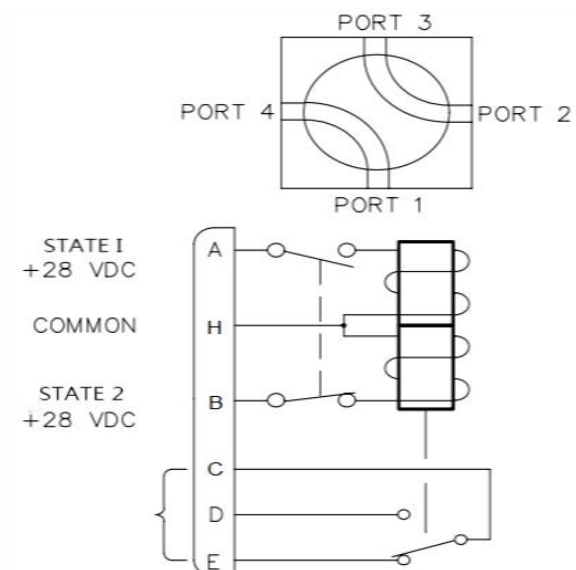
## Mechanical Specifications:

Item	Specification
Switch State	State 1: port1-port2 breakover port3-port4 breakover
	State 2: port1-port 4 breakover port2-port3 breakover
Cycle Life	100000
RF Ports	WR22 Waveguide Flange
Socket	JY3112E10-06PNL
Matching Plug	JY3116F10-06SNL
Degrees of Protection	IP65
Weight	< 0.6Kg

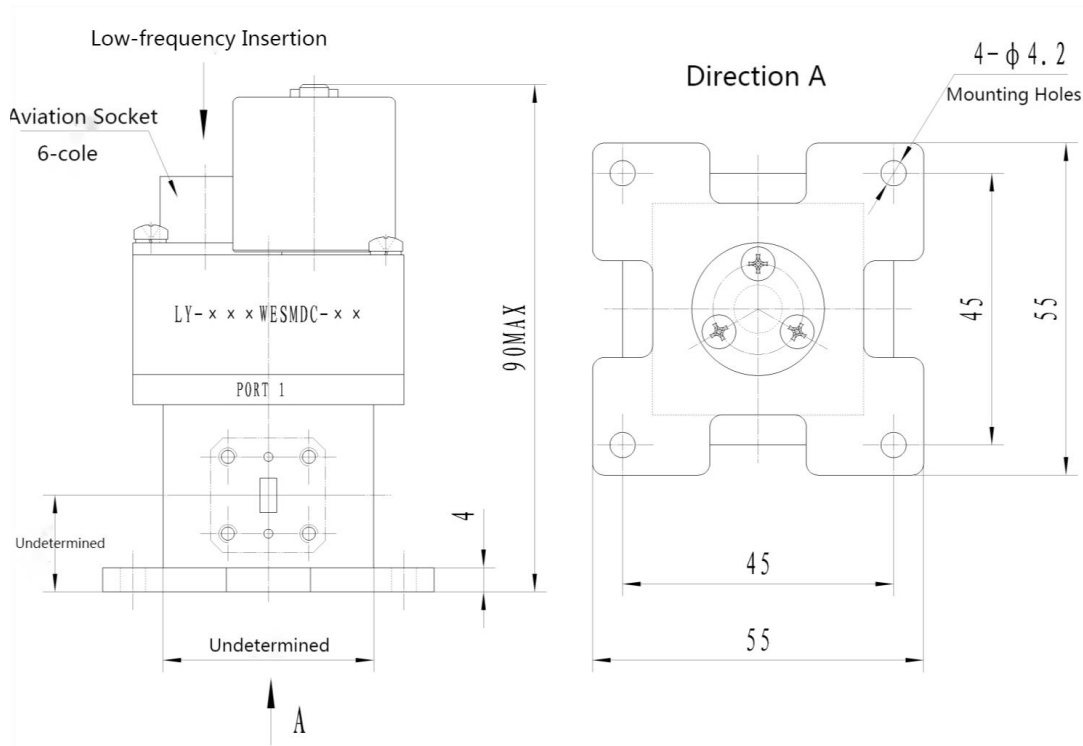
## Control Interfaces:

Code	Definition	Note
A	E1	Switch state control signal, input signal ( $>50\text{ms}$ , $+28\text{v}$ ), channel1-channel2 breakover channel3-channel4 breakove
G	N/A	
B	E2	Switch state control signal, input signal ( $>50\text{ms}$ , $+28\text{v}$ ), channel1-channel4 breakover channel2-channel3 breakove
C	Ic	Switch state control signal feedback signal common, which should be connected to the PGND of the feedback receiving circuit.
D	I1	Pos.1 feedback signal, when channel1-channel2 breakover channel3-channel4 breakover, I1-Ic conduction
E	I2	Pos. 2 feedback signal, when channel1-channel4 breakover channel2-channel3 breakover,, I2-Ic conduction
H	GND	Earthing

## R.F. PATHS:



## Outline & Mounting Schematic:



## Mounting Details:

### Bottom Mounting Interfaces:

Mounting declensions: 55x55; Mounting hole pitch: 45x45; Mounting hole: 4x $\phi$ 4.5;

The hole distance tolerance:  $\pm 0.1$ ; The lug thickness: 4mm.

### Waveguide Flange Interfaces:

12.7x13.46 - hole interfaces; Mounting hole: 4xM3 (hole depth  $\geq 5$ mm) ; The hole distance tolerance:  $\pm 0.02$ .

### Low- frequency Position Interface:

Located at the top of the switch and the insertion direction is perpendicular to the mounting surface.

**Overall Dimensions:  $\leq 55 \times 55 \times 90$**