

Features

- X & Ku band, 10 to 15 GHz Frequency Range
- WR75 Waveguide Interface and SMA Female RF Interface
- High Reliability
- Low Insertion Loss
- High Isolation
- Customization Supported

Applications

Test & Measurement	Space Systems	Radar	Instrumentation
Military Communications		Communication Systems	

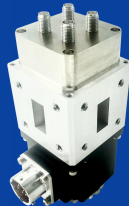
Description

The waveguide-coaxial integrated switch is an electromechanical microwave switching device integrating waveguide interface and coaxial RF interface. It combines the advantages of high-power transmission of waveguides and miniaturized wiring of coaxial cables to realize highly reliable switching of multi-channel microwave signals. Featuring a compact structure and excellent resistance to harsh environments, it provides a reliable signal routing solution for complex RF links.

Technical Specifications

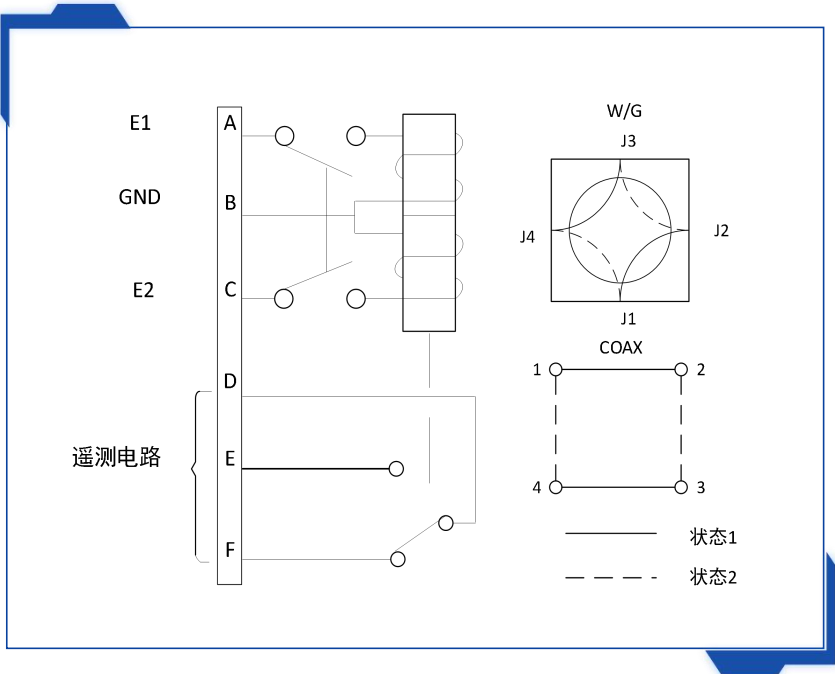
Parameters	Min.	Typ.	Max.	Units
Frequency Range	10		15	GHz
Insertion Loss			Waveguide Coaxial 0.05 0.3	dB
VSWR Output			Waveguide Coaxial 1.15 1.3	
Isolation	Waveguide Coaxial	80 70		dB
Operating Temperature Range	-55		+85	°C
Weight			0.7	Kg

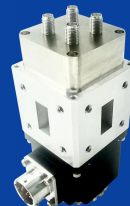
Notes:
Values at 25°C, sea level.



Item	Specification
Drive Type	High-level pulse signal
Latching Method	latching (auto power-off after actuation)
Rated Voltage	28 V
Operating Current	≤ 0.8 A
Switching Time	≤ 50 ms
Low-Frequency Connector	JY3112E12-08PNS
Lifetime	200,000 operations
Ingress Protection	IP63

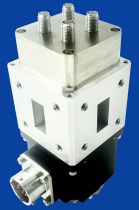
Control Circuit



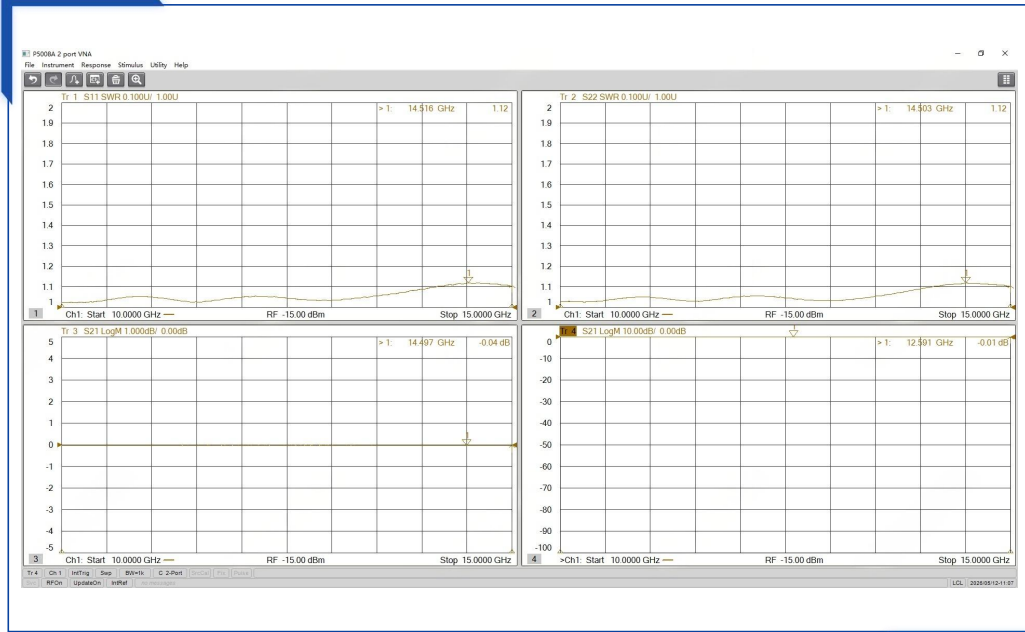


Node Definition

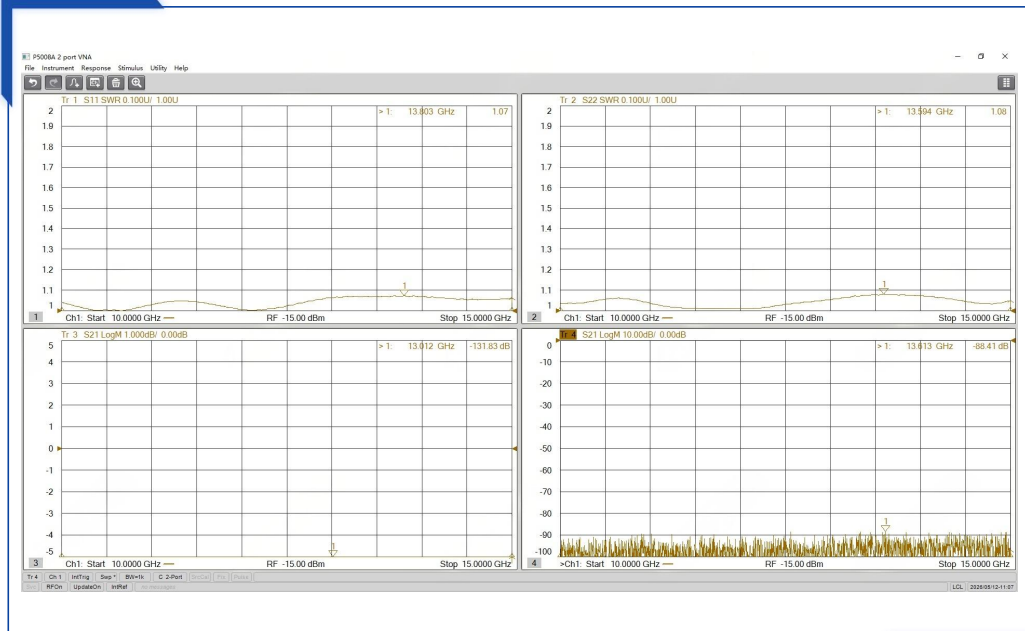
Interface No.	Node No.	Node Definition	Remarks
A	E1	Status 1 control signal (signal hold time > 50 ms)	RF channels 1 & 2 on RF channels 3 & 4 on
G	N/A	Unused node	—
B	E2	Status 2 control signal (signal hold time > 50 ms)	RF channels 1 & 4 on RF channels 2 & 3 on
C	Ic	Common terminal for switch operating status feedback	—
D	I1	Status 1 feedback port	I1 and Ic are connected when switch is in Status 1
E	I2	Status 2 feedback port	I2 and Ic are connected when switch is in Status 2
H	GND	Ground	Control return path



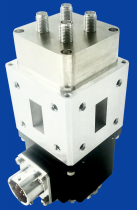
Typical Performances



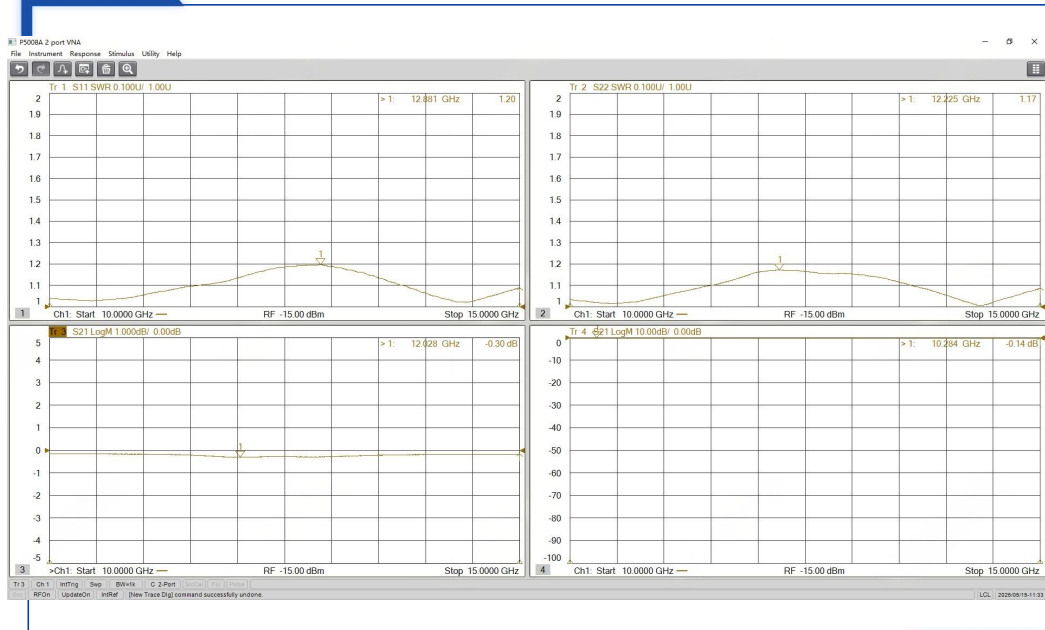
Test Curves of Insertion Loss and VSWR for waveguide



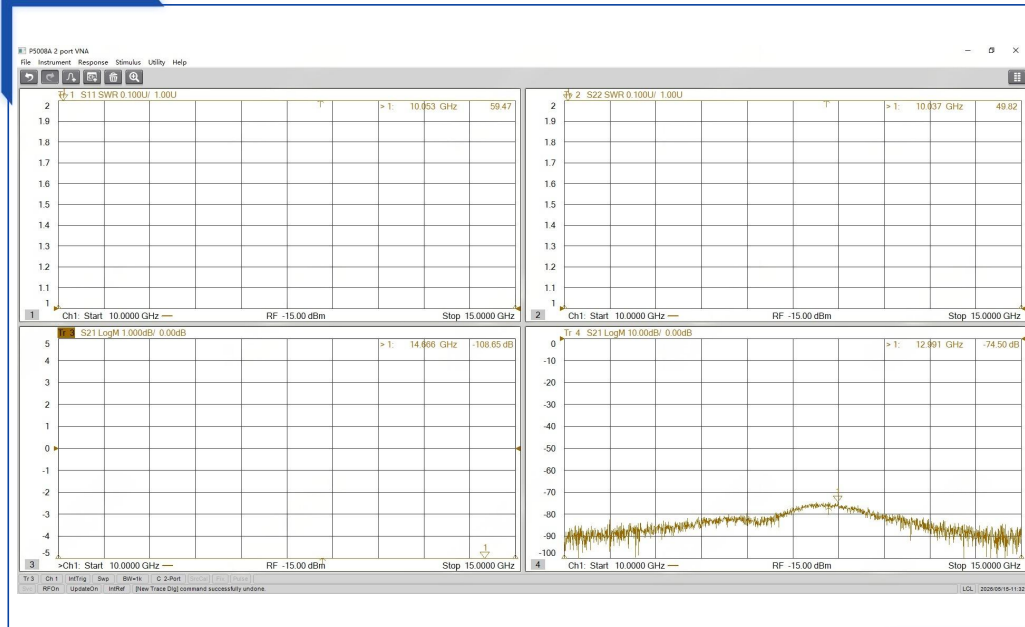
Isolation Test Curve for waveguide



Typical Performances

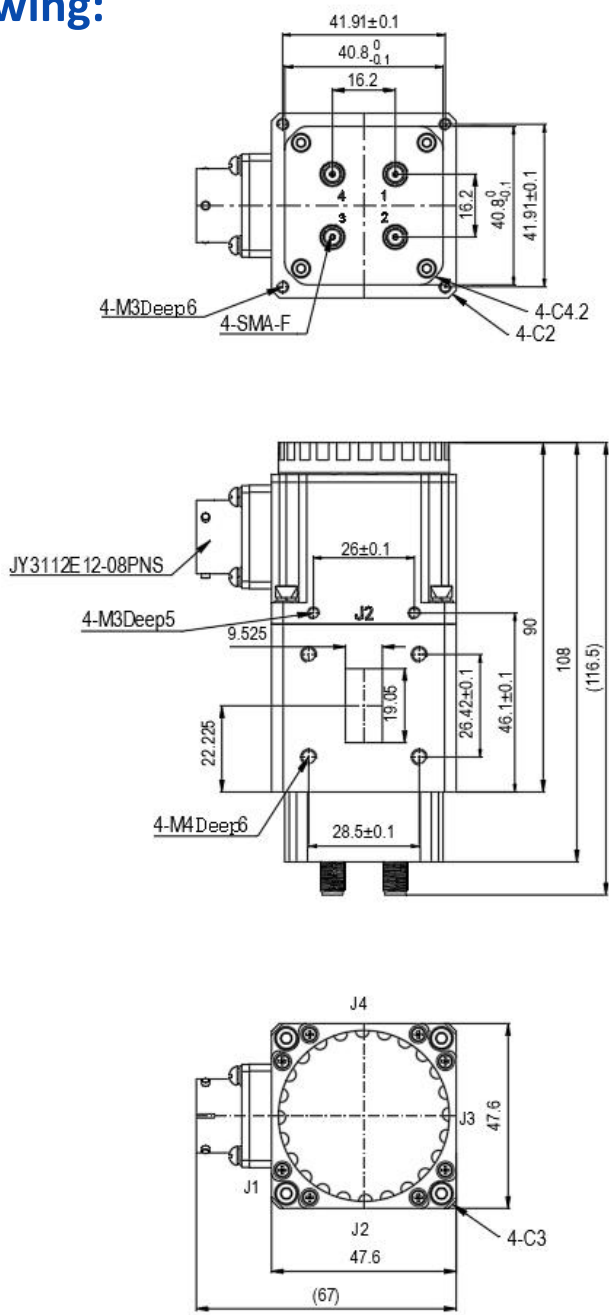


Test Curves of Insertion Loss and VSWR for coaxial

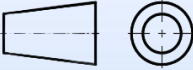


Isolation Test Curve for coaxial

Outline Drawing:



- NOTES:**
- 1.UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
 - 2.ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.
 - 3.DIMENSIONS ARE IN mm.

 西安星航通信科技有限公司 XI'AN SATNAVCOM TECHNOLOGY CO., LTD.	PART NAME		
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