



# ABSORPTIVE SWITCH

## MVE9424

**SOLID-STATE, SP4T**

### Features

- ✓ Ultra Wide Band Operation 0.02-18GHz
- ✓ TTL compatible driver included
- ✓ Fast Switching Speed
- ✓ Low Insertion Loss and High Isolation
- ✓ Customization available upon request

### Specification

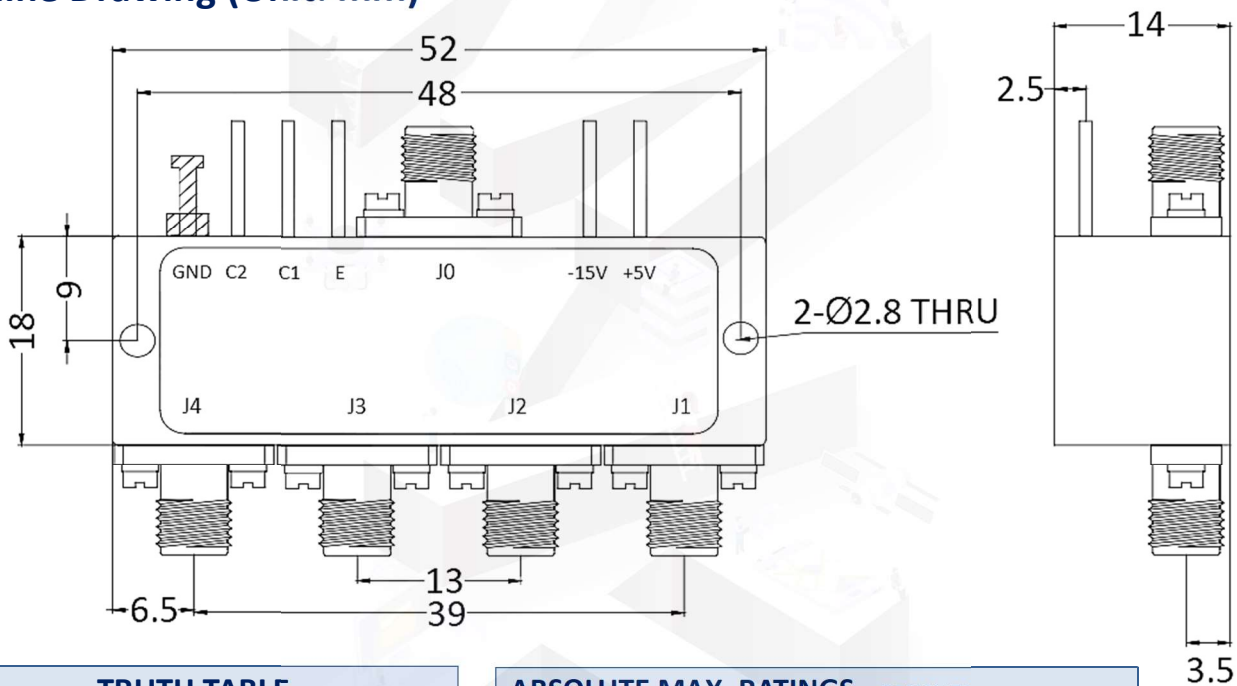
RF CHARACTERISTICS			
FREQUENCY RANGE	MIN.	TYP.	MAX.
	0.02-18 GHz		
VSWR MAX.		1.5:1	2.0:1
ISOLATION MIN.	70dB	85dB	
INSERTION LOSS		4.0 dB	4.5 dB
I.L. TEMPERATURE COEFFICIENT	0.003dB/ °C		
ELECTRICAL CHARACTERISTICS			
RF INPUT POWER			30dBm
DC POWER DISSIPATION (CW)		0.85W	
IIP3		38dBm	
0.1dB COMPRESSION P0.1dB		30dBm	
SWITCHING SPEED			250 ns
BIAS CURRENT (+5V / -15V)			150 / 80 mA
MECHANICAL CHARACTERISTICS			
INPUT /OUTPUT CONNECTOR	SMA-Female		
FINISHING	Gold Plating		
MATERIAL	Aluminum		
SEAL	Hermetically Sealed ( optional )		



ENVIRONMENT SPECIFICATIONS	
OPERATIONAL TEMPERATURE	-40°C~+85°C (Case Temperature)
STORAGE TEMPERATURE	-50°C~+105°C
ALTITUDE	30,000 ft. (Epoxy Seal Controlled environment)
(OPTIONAL)	60,000 ft. 1.0psi min (Hermetically Seal Uncontrolled environment)
VIBRATION	25g RMS (15 degree 2KHz) endurance, 1 hour per axis
HUMIDITY	100% RH at 35c, 95% RH at 40°C
SHOCK	20G for 11msec half sine wave, 3 axis both directions

Tolerance= ±0.5mm

**Outline Drawing (Unit: mm)**



TRUTH TABLE			
CONTROL INPUT TTL			SIGNAL PATH STATE
E	C2	C1	
0	0	0	J0-J1
0	0	1	J0-J2
0	1	0	J0-J3
0	1	1	J0-J4
1	X	X	ALL OFF
<b>CONTROL PIN CUSTOMIZATION AVAILABLE UPON REQUEST</b>			

ABSOLUTE MAX. RATINGS		DESIGN TO MEET THE SPEC.
BIASING	+5V±10%/-15V±10%	
TTL CONTROL VOLTAGE	LOW(0)=0-0.8V HIGH(1)=2.8-5V	

**NOTE:** TTL pins cannot be connected to the negative voltage otherwise the internal driver will be damaged.

NOTES:

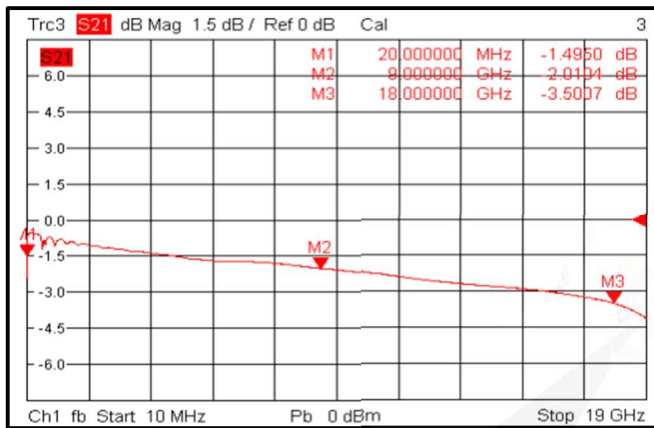
1. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME
2. CUSTOMER OUTLINE DRAWING FOR REFERENCE ONLY



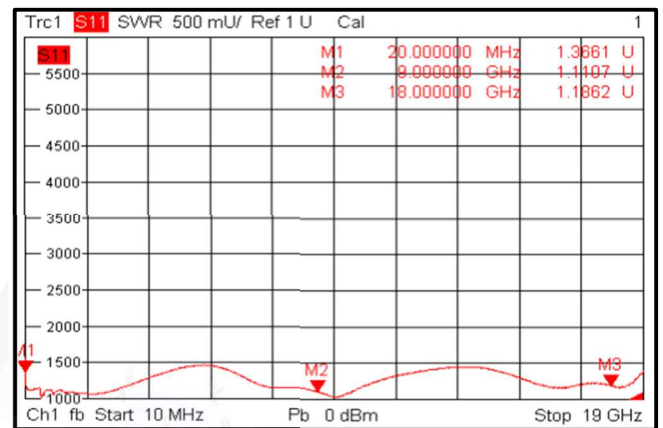


## Typical Test Result

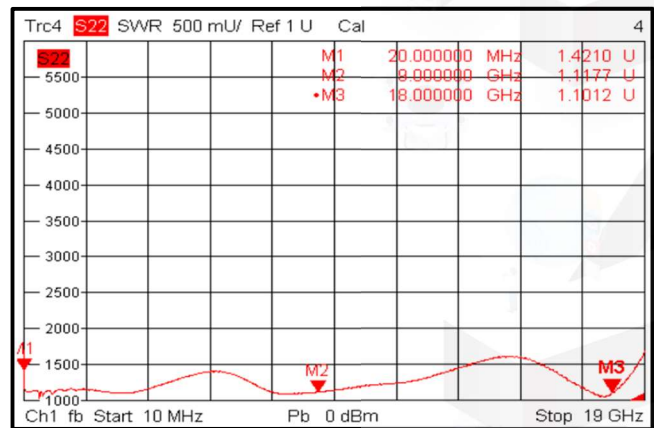
### Insertion Loss @ +25°C



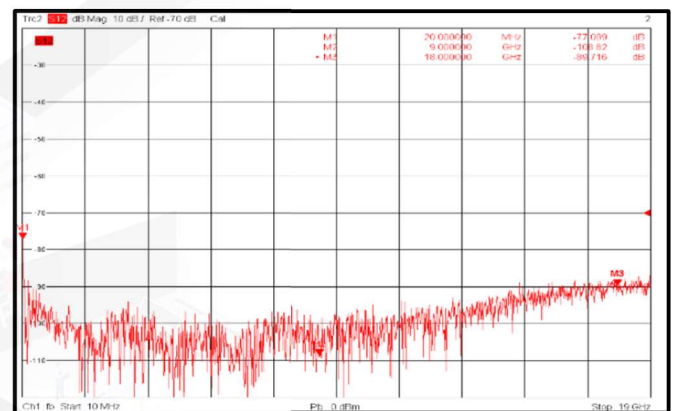
### Input VSWR @ +25°C



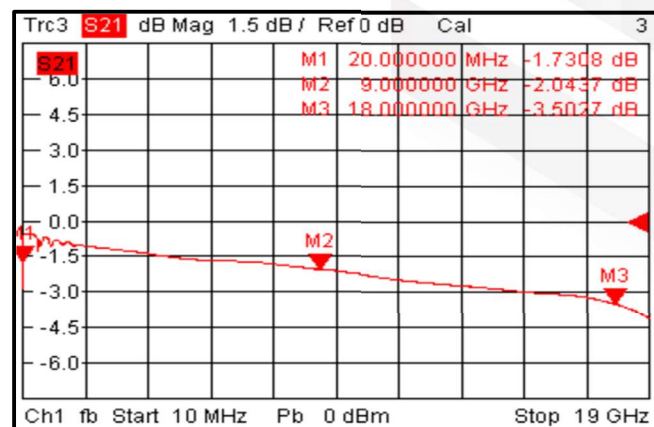
### Output VSWR @ +25°C



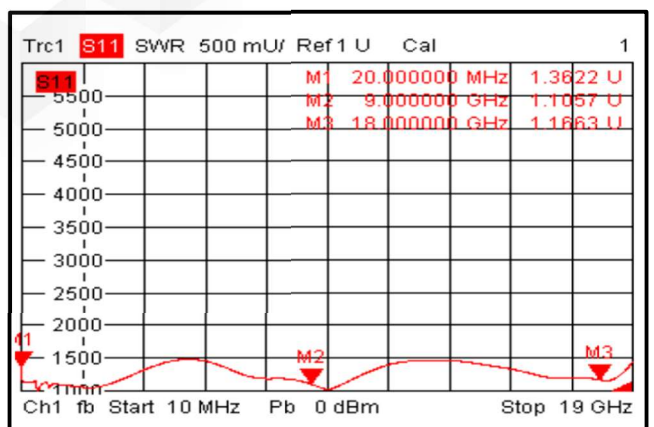
### Isolation @ +25°C



### Insertion Loss @ -40°C

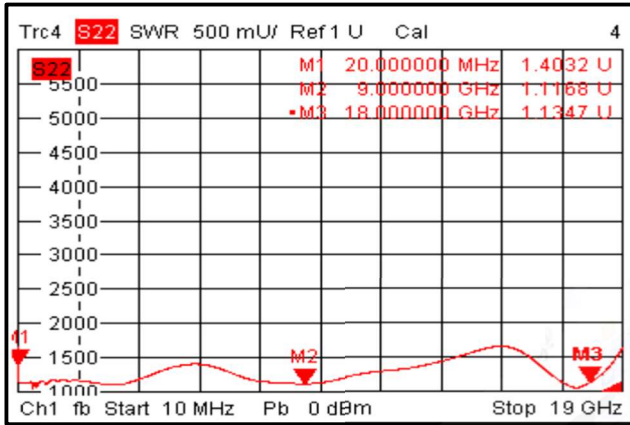


### Input VSWR @ -40°C

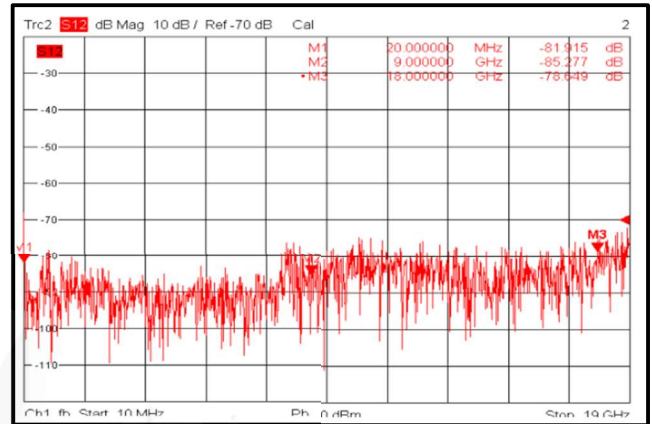




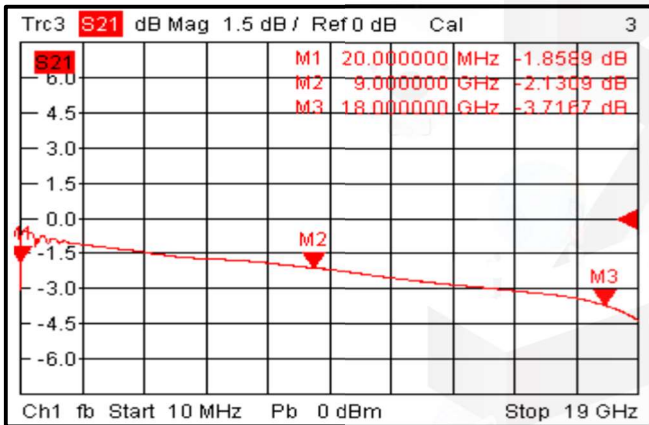
### Output VSWR @ -40°C



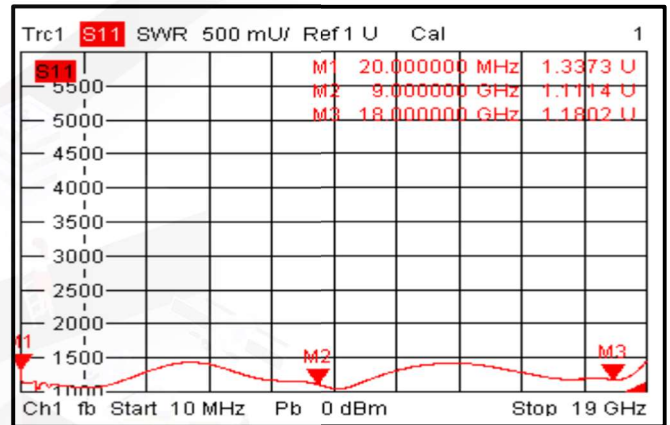
### Isolation @ -40°C



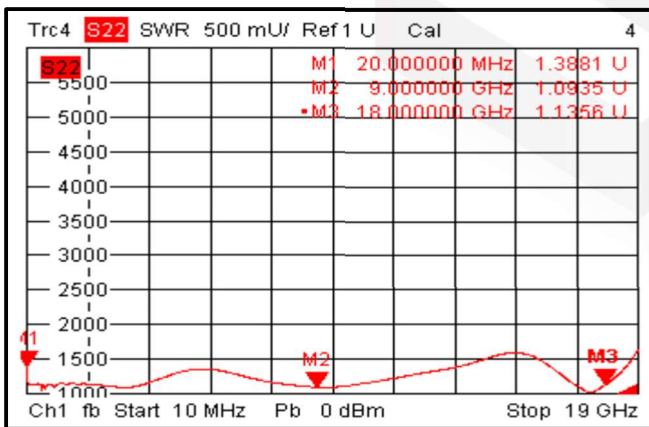
### Insertion Loss @ +85°C



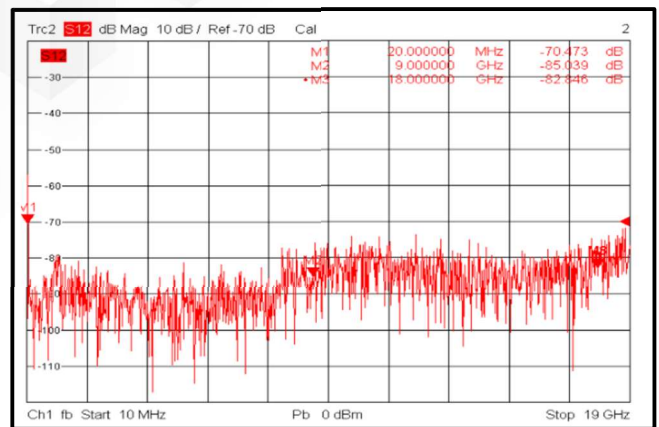
### Input VSWR @ +85°C



### Output VSWR @ +85°C



### Isolation @ +85°C



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