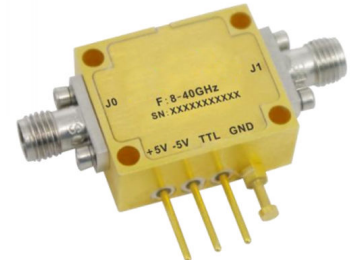




Absorptive 8-40GHz Coaxial SPST Switch

Features

- Wide Band Operation 8-40GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request



Typical Applications

- Wireless Infrastructure
- 5G communication
- Test and measurement Instrument

RF Microwave & VSAT
Fiber Optics

Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	8-18			18-30			30-43.5			GHz
Insertion Loss		1.8	2.5		2.8	3.5		3.2	4.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/ ° C
Isolation	80	90		70	80		70	75		dB
Input VSWR		1.8	2.5		1.8	2.5		1.8	2.5	: 1
Output VSWR		1.8	2.5		1.8	2.5		1.8	2.5	: 1
RF Input power			23			23			23	dBm
DC Power Dissipation		0.3			0.3			0.3		W
0.1dB Compression Point (P0.1dB)		23			23			23		dBm
IIP3		50			50			48		dBm
Switching Speed	50									ns
Weight	0.35									ounces
Impedance	50									Ω
Bias Current (+5V/-5V)	50/50									mA
Input / Output Connectors	2.92-Female									
Finish	Gold Plated									
Material	Aluminum									
Sealing	Hermetically Sealed (Optional)									



Absolute Maximum Ratings

Biassing	+5V ± 10%/-5V ± 10%
----------	---------------------

Environmental Specifications

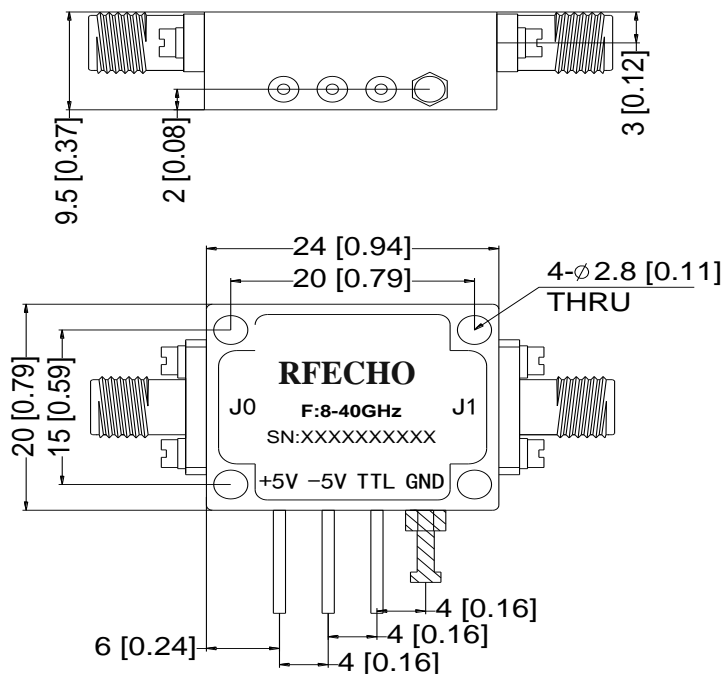
Operational Temperature	-40°C~+85°C(Case Temperature)
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

Ordering Information

Part No.	Description
DBSA0108004000A	SPST 8-40GHz PIN Diode Switch

Outline Drawing:

All Dimensions in mm (inches)



Notes:

J0: Reflective Port

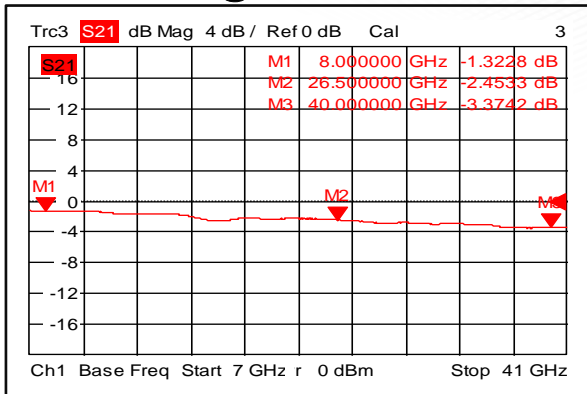
J1: Absorptive port

Truth Table

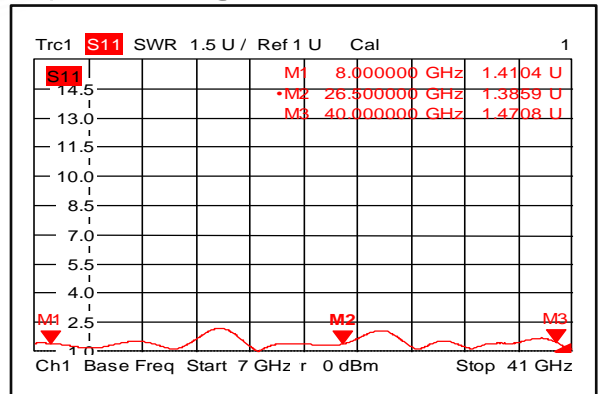
TTL Control Voltage THRESHOLD	Low(0)=0~0.8V
	High(1)=2.8~5V
Control Input TTL	State
1	ON
0	OFF
Control Pin Customization available upon request	



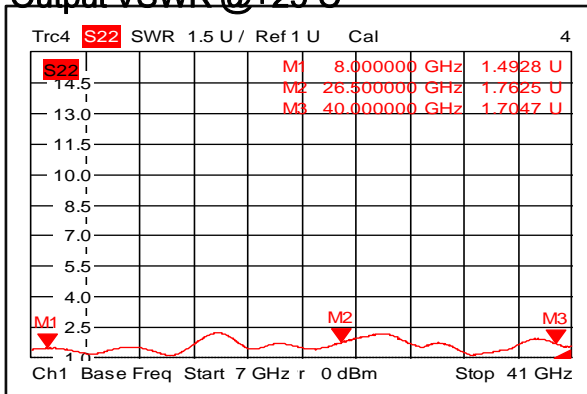
Insertion Loss @+25°C



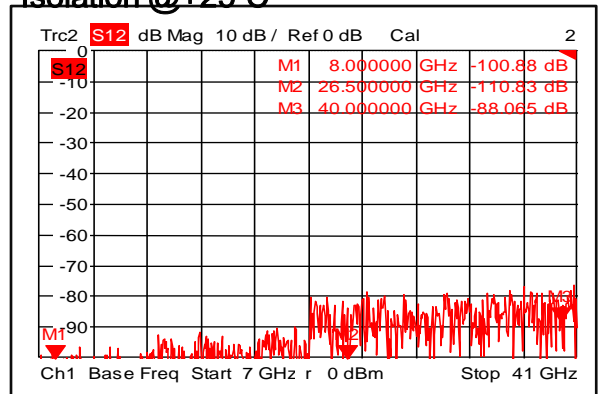
Input VSWR @+25°C



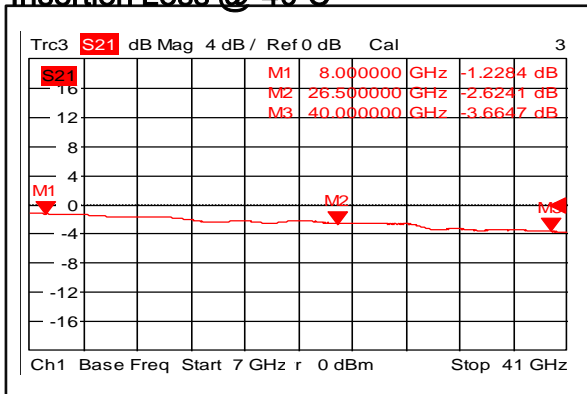
Output VSWR @+25°C



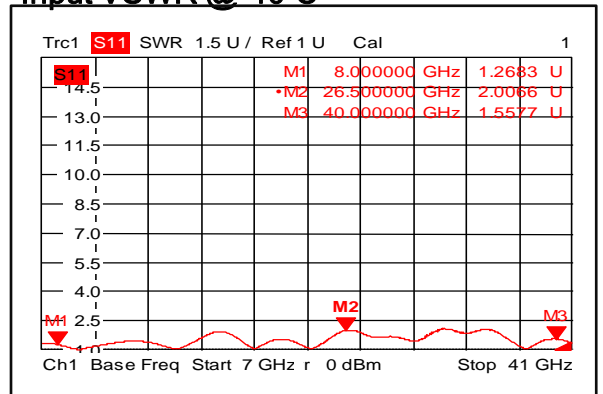
Isolation @+25°C



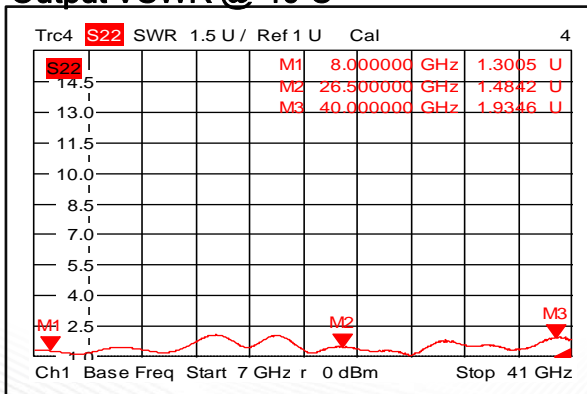
Insertion Loss @-40°C



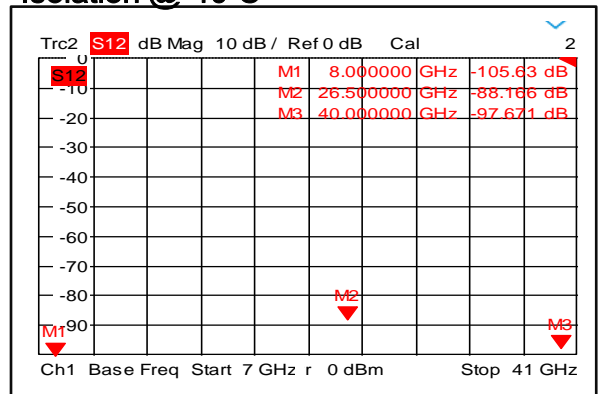
Input VSWR @-40°C



Output VSWR @-40°C

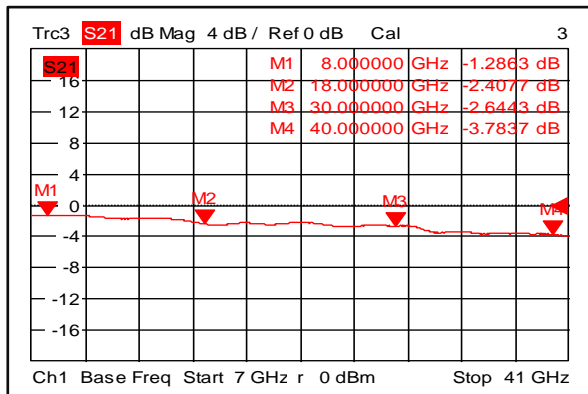


Isolation @-40°C

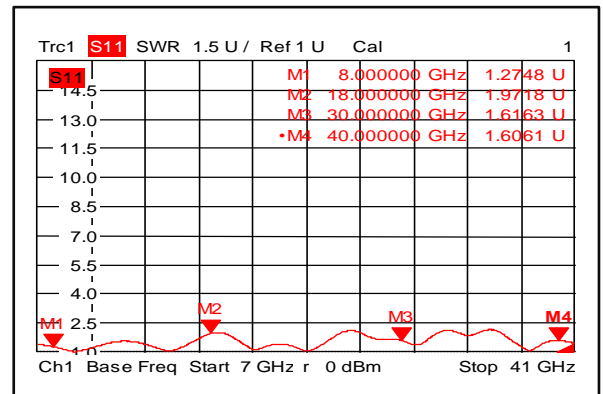




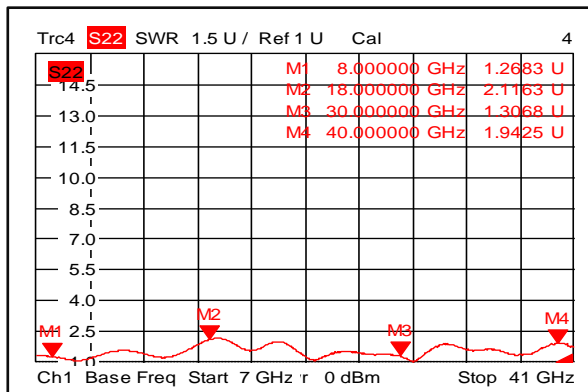
Insertion Loss @+85°C



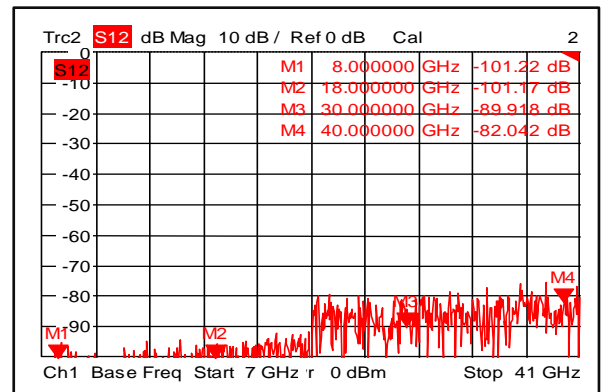
Input VSWR @+85°C



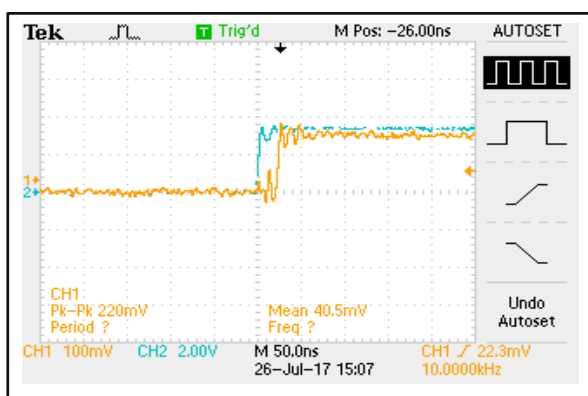
Output VSWR @+85°C



Isolation @+85°C



Switching Speed



Switching Speed

