

Reflective 0.7-0.9GHz Coaxial SP2T Switch

Features

- Wide Band Operation 0.7-0.9GHz
- 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	Units
Frequency Range	0.7		0.9	GHz
Insertion Loss		0.3	0.5	dB
Insertion Loss Temperature Coefficient		0.003		dB / °C
Isolation	60	85		dB
Input VSWR		1.2	1.5	: 1
Output VSWR		1.2	1.5	: 1
RF Input power (CW)			30	dBm
DC Power Dissipation		0.2		W
0.1dB Compression P0.1dB		30		dBm
IIP3		55		dBm
Switching Speed		70	100	ns
Weight		0.71		ounces
Impedance		50		Ω
Biasing(+5V)		150		mA
Input /Output Connectors		SMA-Female		
Finish		Gold Plated		
Material		Aluminum		
Seal		Hermetically Sealed (optional)		



Absolute Maximum Ratings

Biasing	+5V±10%
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Environmental Specifications

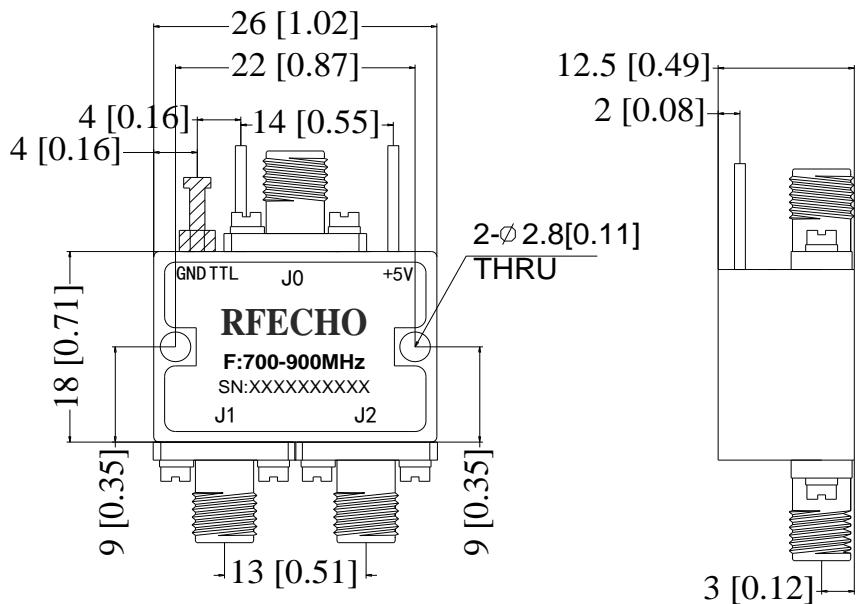
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment) 60,000 ft. 1.0psi min (Hermetically Sealed Uncontrolled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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

Ordering Information

Part No.	Description
DBSA0200700090A	SP2T 0.7-0.9GHz PIN Diode Switch

Outline Drawing:

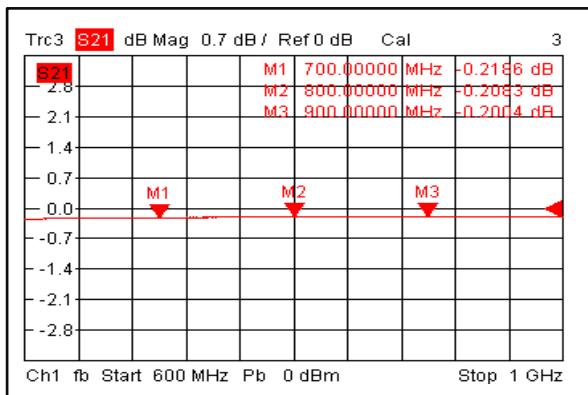
All Dimensions in mm (inches)



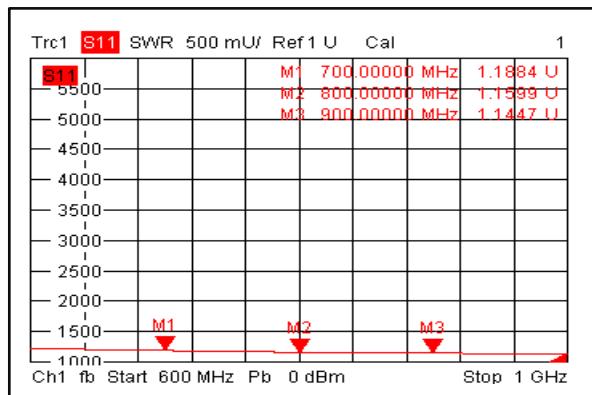
Truth Table

TTL Control Voltage	Low(0)=0~0.8V
THRESHOLD	High(1)=2.8~5V
Control Input TTL	Signal Path State
0	J0-J1
1	J0-J2
Control Pin Customization	available upon request

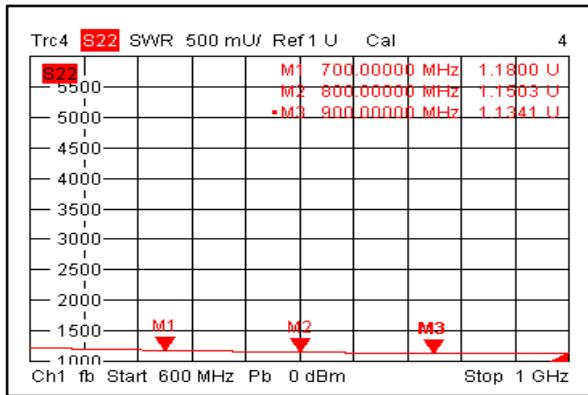
Insertion Loss



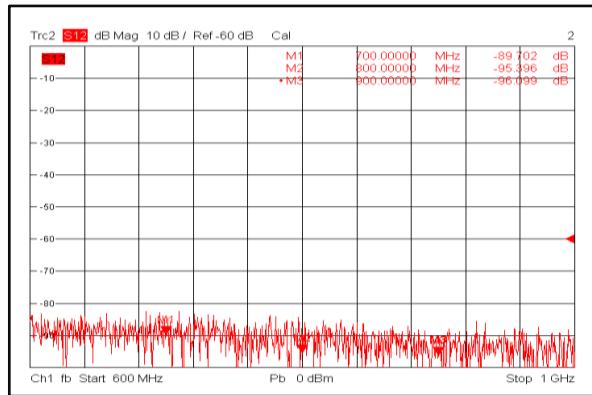
Input VSWR



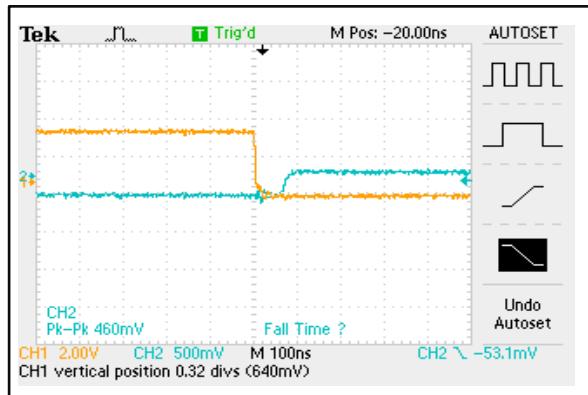
Output VSWR



Isolation



Switching Speed



Switching Speed

