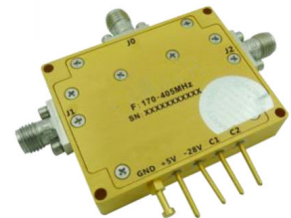




Reflective 170-405MHz Coaxial SP2T Switch

Features

- Wide Band Operation 170-405MHz
- 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	170-405			MHz
Insertion Loss		0.5	0.7	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Isolation	60	65		dB
Input VSWR		1.4	1.5	: 1
Output VSWR		1.4	1.5	: 1
RF Input Power (CW)			100	W
DC Power Dissipation		1.3		W
0.1dB Compression Point(P0.1dB)		50		dBm
IIP3		55		dBm
Switching Speed			1.2	us
Weight	1.41			ounces
Impedance	50			Ω
Bias Current (+5V/-28V)	250/50			mA
Input / Output Connectors	SMA - Female			
Finishing	Gold Plating			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			



Absolute Maximum Ratings

Biasing	+5V±10%/-28V±10%
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Environmental Specifications

Operational Temperature	-40°C~+60°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
DBSR0200170040A	SP2T 170-405MHz PIN Diode Switch

Outline Drawing:

All Dimensions in mm (inches)

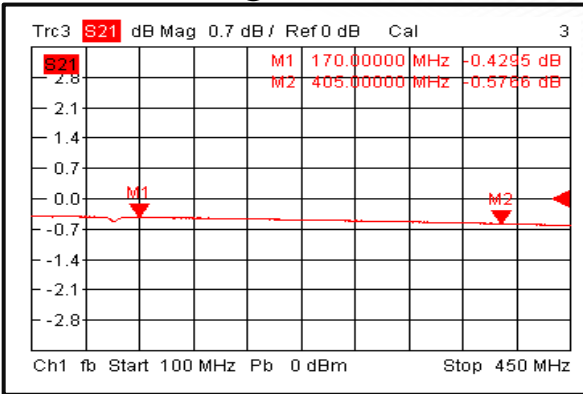
The drawing shows a rectangular component with dimensions: 44 [1,73] mm width, 35 [1,38] mm height, and 14,5 [0,57] mm depth. It features two SMA connectors (J1, J2) and a center pin (J0). Control pins are labeled GND, +5V, -28V, C1, and C2. A note indicates 4-Ø 2.2 [0,09] THRU holes. The component is labeled 'RFECHO F:170-405MHz SN:XXXXXXXXXX'.

TTL Control Voltage THRESHOLD		Low(0)=0~0.8V High(1)=2.8~5V
Control Input TTL		Signal Path State
C2	C1	
0	0	OFF
0	1	J0-J1
1	0	J0-J2
1	1	Not Used

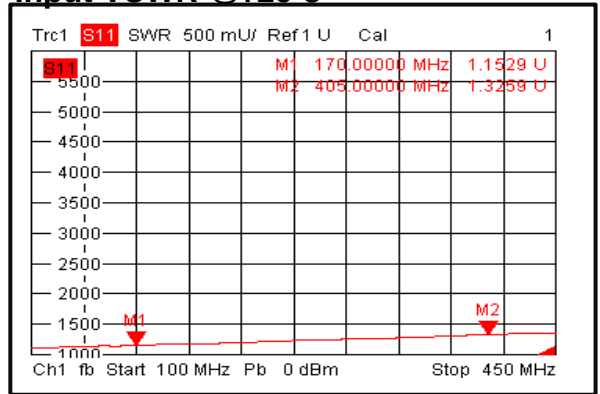
Control Pin Customization available upon request



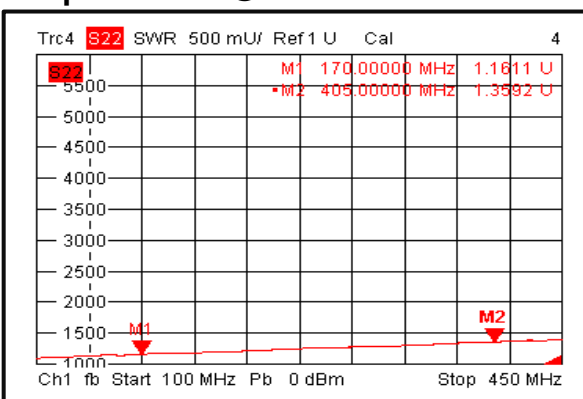
Insertion Loss @+25°C



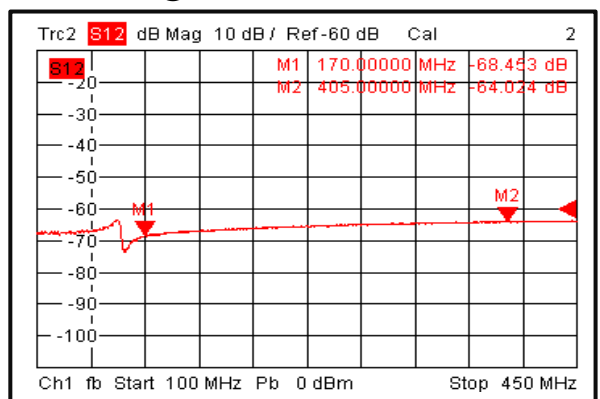
Input VSWR @+25°C



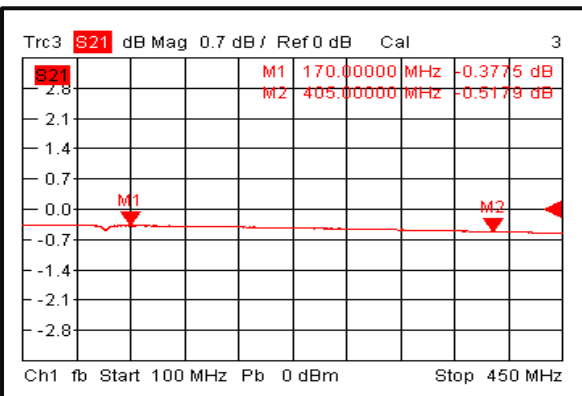
Output VSWR @+25°C



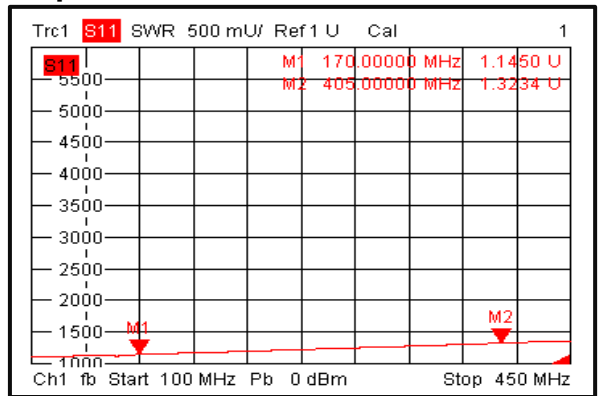
Isolation @+25°C



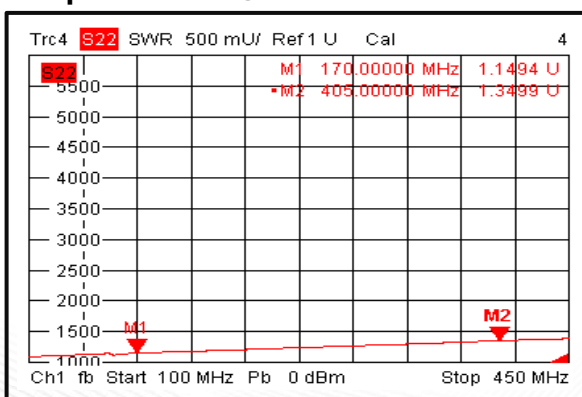
Insertion Loss @-40°C



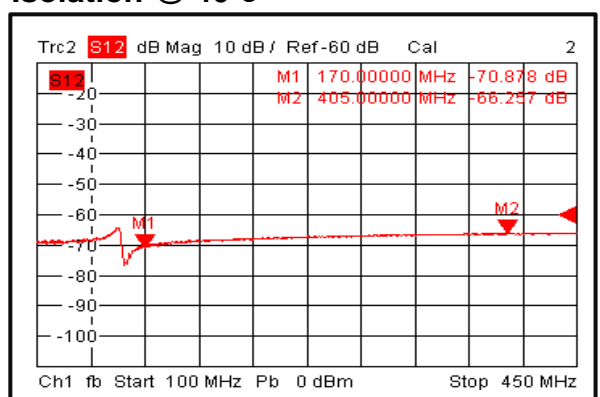
Input VSWR @-40°C



Output VSWR @-40°C

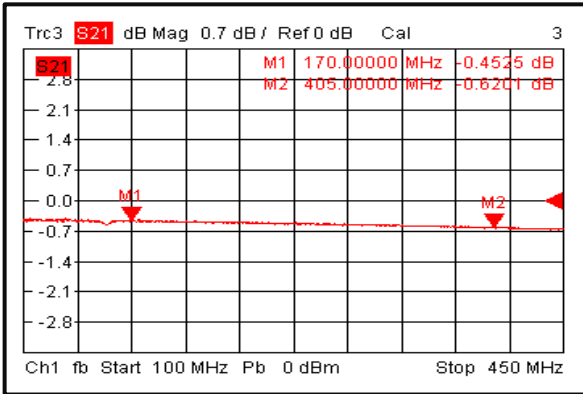


Isolation @-40°C

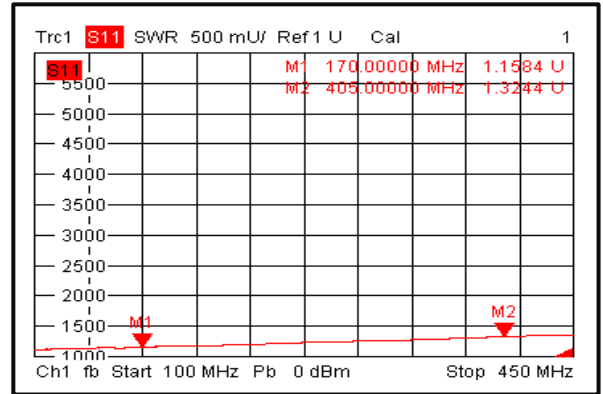




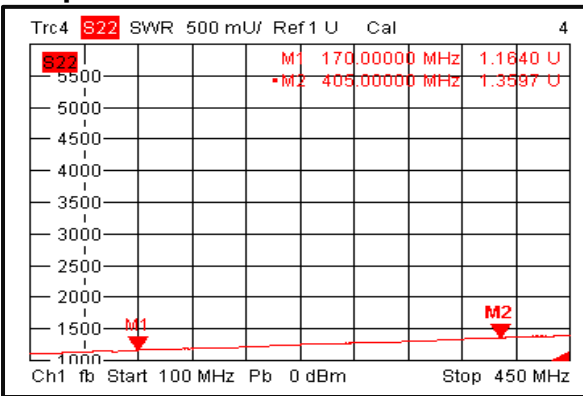
Insertion Loss @+60°C



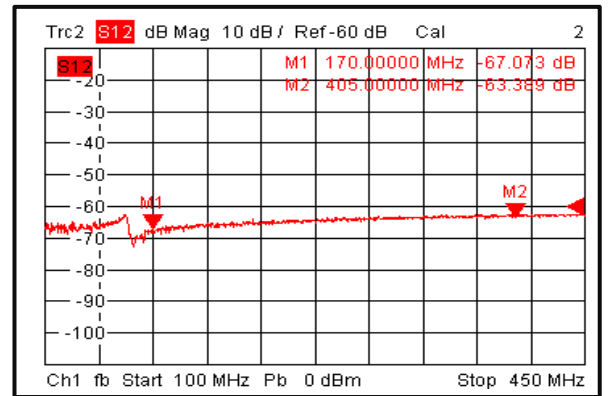
Input VSWR @+60°C



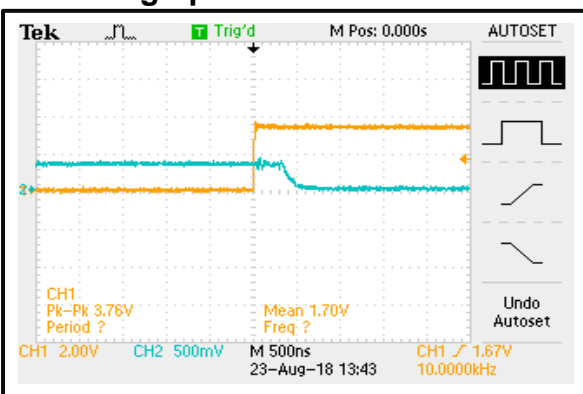
Output VSWR @+60°C



Isolation @+60°C



Switching Speed



Switching Speed

