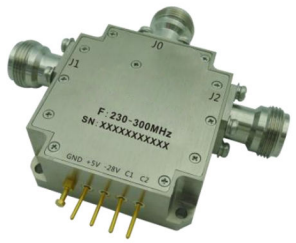
Reflective Coaxial SP2T Switch 230 – 300MHz

Features

- Wide Band Operation 230-300MHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- High Power Cold Switching
- Customization available upon request



Typical Applications

Wireless Infrastructure
- 5G communication
- Test and measurement Instrument

RF Microwave & VSAT
Fiber Optics

Parameter	Min.	Typ.	Max.	Units
Frequency Range		230 - 300		MHz
Insertion Loss		0.4	0.6	dB
Insertion Loss Temperature Coefficient		0.003		dB/ ° C
Isolation	50	65		dB
Input VSWR		1.2	1.3	: 1
Output VSWR		1.2	1.3	: 1
Input Peak Power (50% duty cycle,125us pulse width)			125	W
DC Power Dissipation		2		W
0.1dB Compression Point (P0.1dB)		51		dBm
IIP3		50		dBm
Switching Speed			1.2	us
Weight		5.29		ounces
Impedance		50		Ω
Bias Current(+5V / -28V)		250/50		mA
Input / Output Connectors		N - Female		
Finish		Nickel Plated		
Material		Aluminum		
Sealing		Hermetically Sealed (Optional)		

Absolute Maximum Ratings

Biasing	+5V±10%/-28V±10%

Environmental Specifications

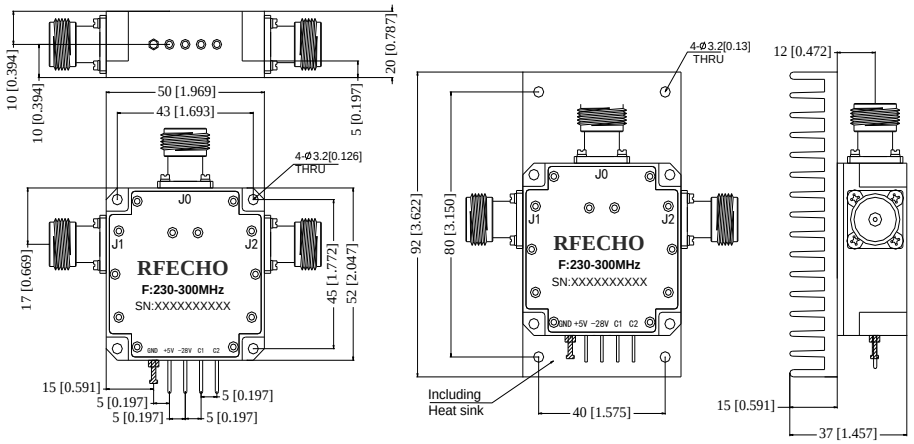
Operational Temperature	-40ºC~+85ºC
Storage Temperature	-50ºC~+105ºC
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35ºc, 95%RH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

Ordering Information

Part No.	Description
DBSR0200230030A	SP2T 230-300MHz PIN Diode Switch

Outline Drawing:

All Dimensions in mm (inches)
Housing Tolerances±0.2 [0.008]



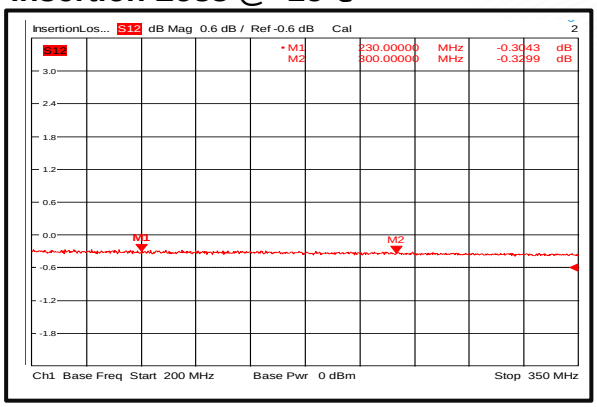
Truth Table

TTL Control Voltage THRESHOLD	Low(0)=0~0.8V
	High(1)=2.8~5V

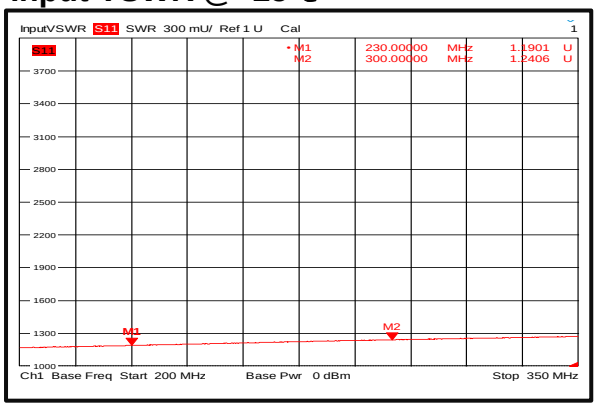
Control Input TTL		Signal Path State
C2	C1	
0	0	OFF
0	1	J0-J1
1	0	J0-J2
1	1	Not Used

Control Pin Customization available upon request

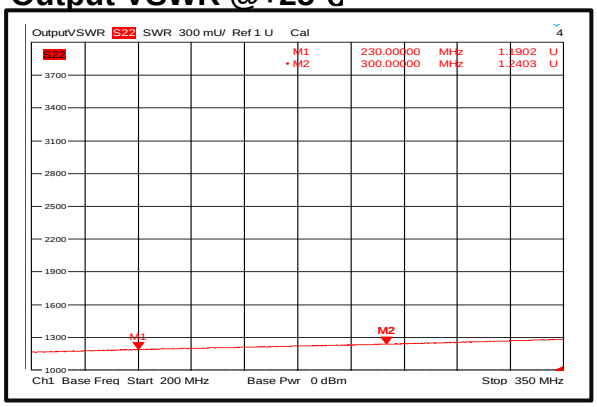
Insertion Loss @+25℃



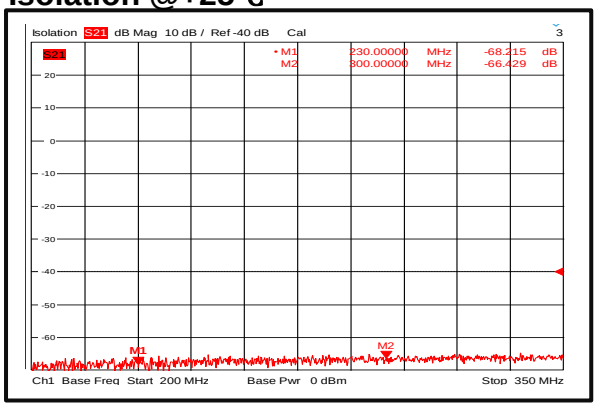
Input VSWR @+25℃



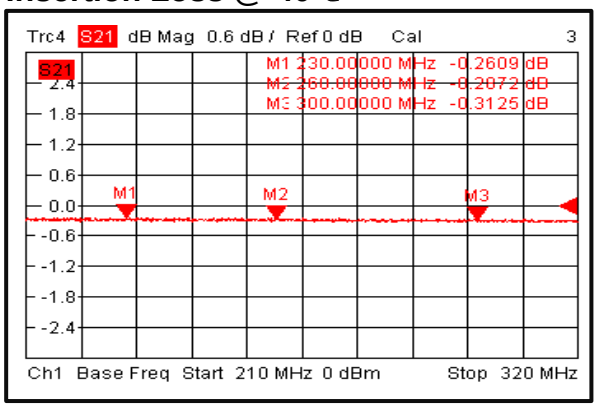
Output VSWR @+25℃



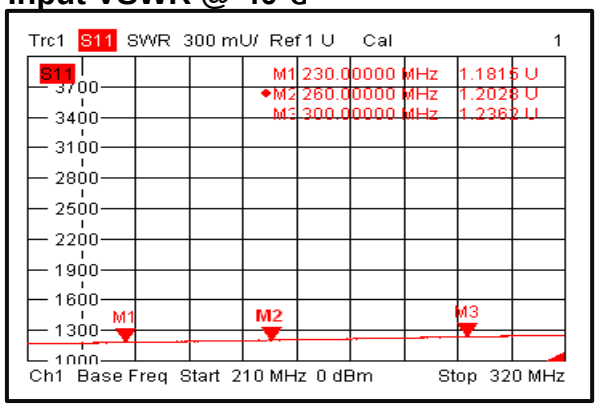
Isolation @+25℃



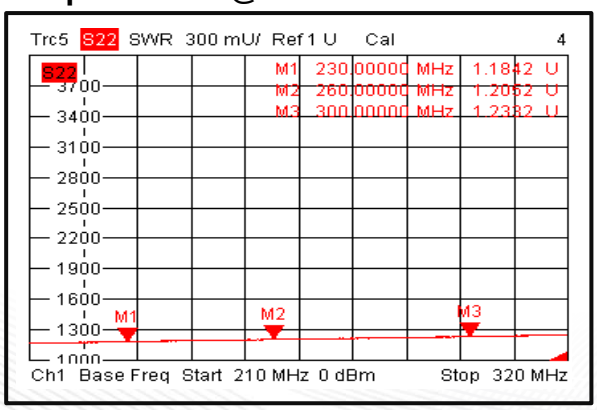
Insertion Loss @-40℃



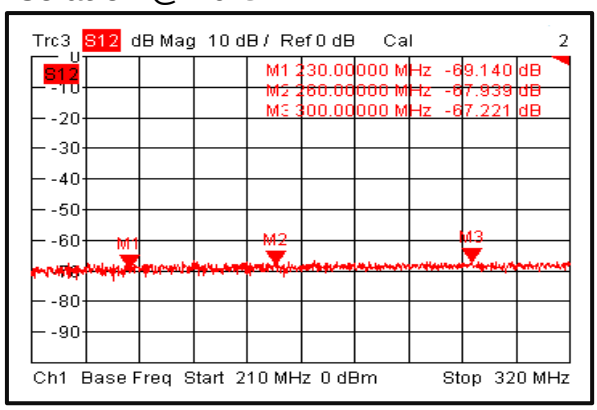
Input VSWR @-40℃



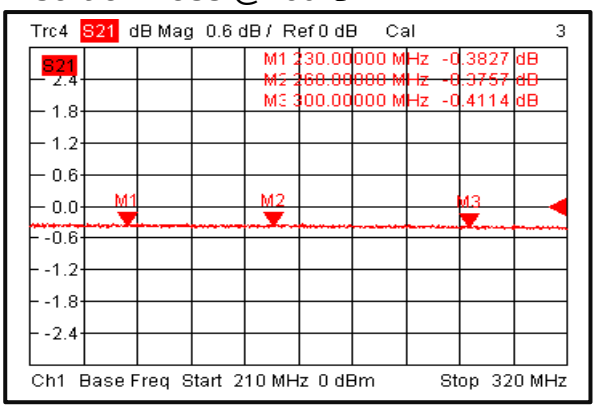
Output VSWR @-40℃



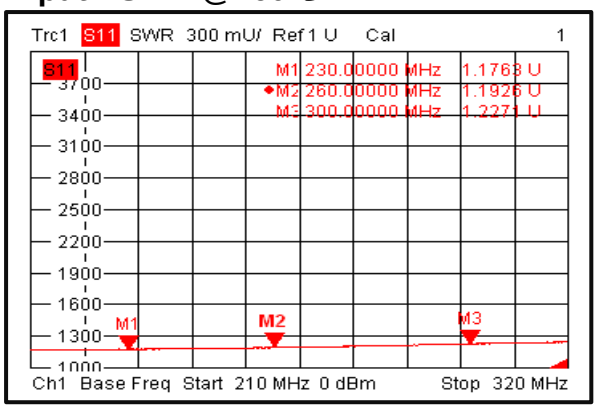
Isolation @-40℃



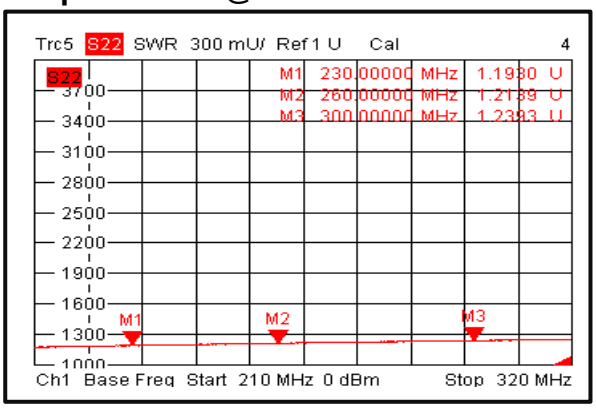
Insertion Loss @+60℃



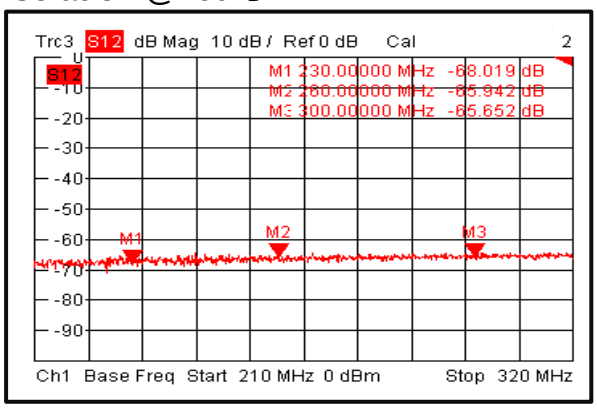
Input VSWR @+60℃



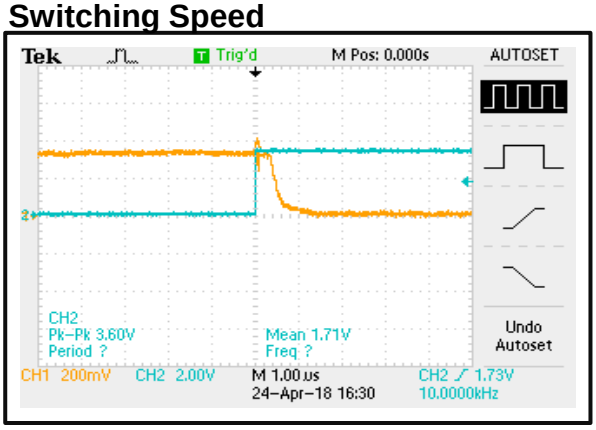
Output VSWR @+60℃



Isolation @+60℃



Switching Speed



Switching Speed