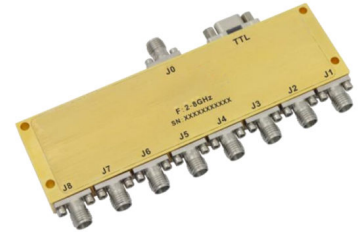




Absorptive 2-8GHz Coaxial SP8T Switch

Features

- Wide Band Operation 2-8GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request



Typical Applications

- Wireless Infrastructure
- Military & Aerospace
- Fiber Optics

RF Microwave & VSAT
Test Instrument

Parameters	Min	Typ.	Max	Units
Frequency Range	2-8			GHz
Insertion Loss		2.2	2.8	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Isolation	60	70		dB
Input VSWR		1.3	1.6	: 1
Output VSWR		1.3	1.6	: 1
RF Input power (CW)	1			W
Power Dissipation (CW)		0.4		W
0.1dB Compression P0.1dB		30		dBm
IM3		40		dBc
IIP3		50		dBm
Switching Speed			100	ns
Weight	2.47			ounces
Impedance	50			Ω
Biasing(+5V/-5V)	350/30			mA
Input /Output Connector	SMA-Female			
Finishing	Gold Plating			
Material	Aluminum			
Seal	Hermetically Sealed (optional)			



Absolute Maximum Ratings

Biasing	$+5V \pm 10\%$ / $-5V \pm 10\%$
TTL Control Voltage	0~0.8V/2.8~5V

Ordering Information

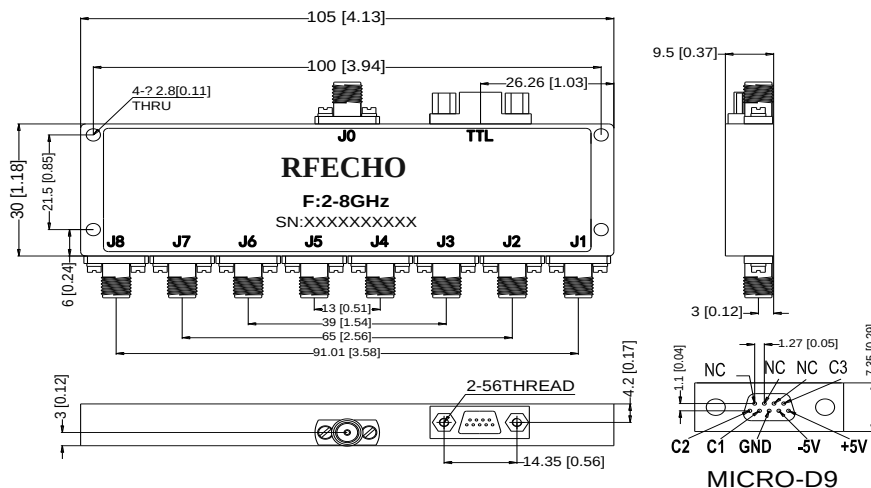
Part No.	ECCN	Description
DBSA0802000800A	EAR99	SP8T 2-8GHz PIN Diode Switch

Environmental Specifications

Operational Temperature	-45°C~+85°C
Storage Temperature	-55°C~+125°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 35c, 95%RH at 40°c
Shock	20G for 11msec half sine wave, 3 axis both directions

Outline Drawing:

All Dimensions in mm (inches)

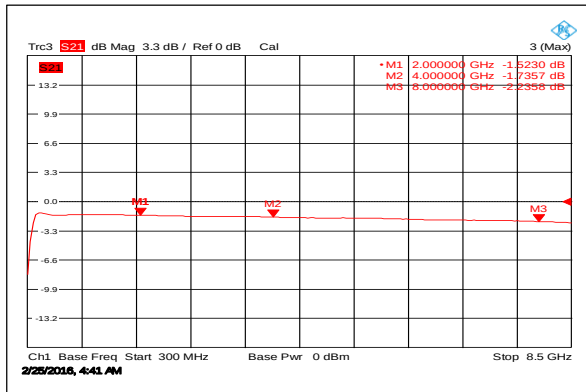


Truth Table

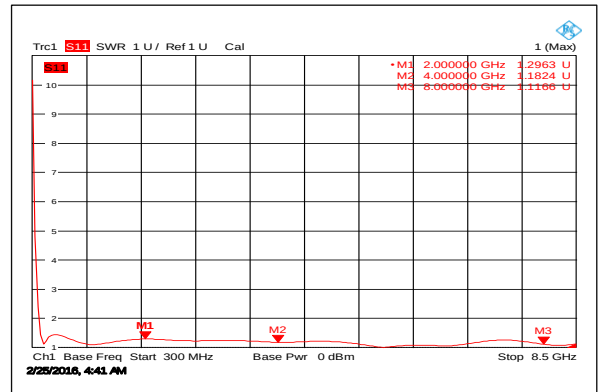
Control Input TTL			Signal Path State
C3	C2	C1	
0	0	0	J0-J1
0	0	1	J0-J2
0	1	0	J0-J3
0	1	1	J0-J4
1	0	0	J0-J5
1	0	1	J0-J6
1	1	0	J0-J7
1	1	1	J0-J8
Control Pin Customization available upon request			



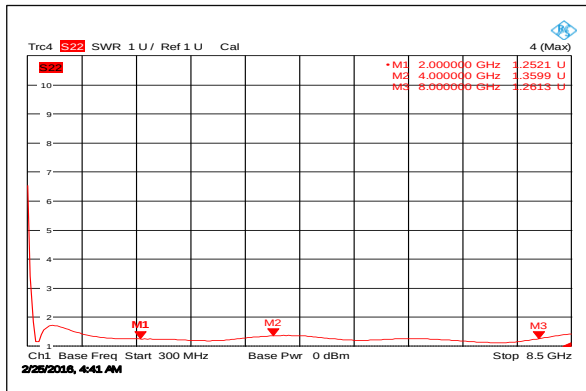
Insertion Loss



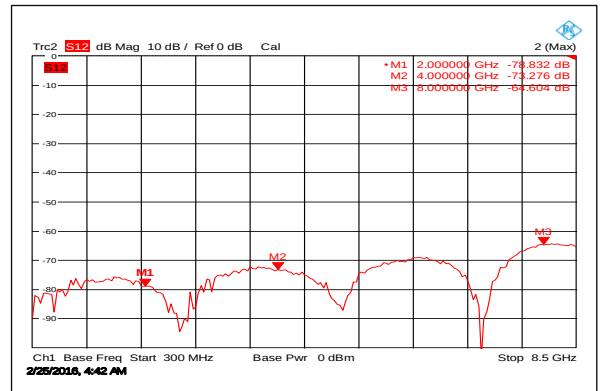
Input VSWR



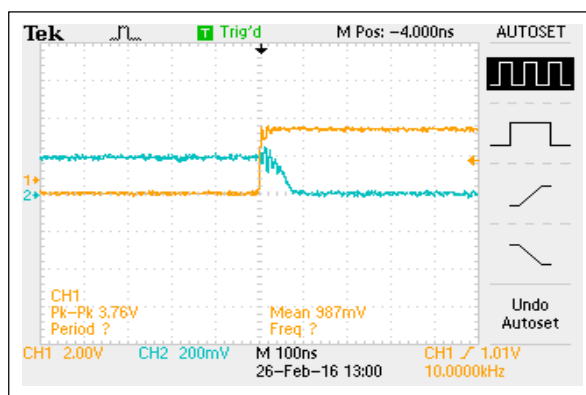
Output VSWR



Isolation



Turn on Switching Speed



Turn off Switching Speed

