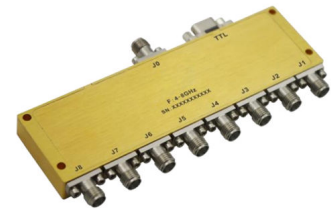




Absorptive 4-8GHz Coaxial SP8T Switch

Features

- Wide Band Operation 4-8GHz
- 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		4-8		GHz
Insertion Loss		1.8	2.0	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Isolation	80	85		dB
Input VSWR		1.4	1.6	: 1
Output VSWR		1.4	1.6	: 1
RF Input power (CW)			30	dBm
Power Dissipation		1.8		W
0.1dB Compression Point(P0.1dB)		30		dBm
IIP3		50		dBm
Switching Speed		100		ns
Weight		2.82		ounces
Impedance		50		Ω
Bias Current (+5V / -5V)		350/50		mA
Input / Output Connectors	SMA-Female			
Interface and Control Connector	MICRO-D9(Female)			
Finishing	Gold Plating			
Material	Aluminum			
Sealing	Hermetically Sealed (optional)			



Absolute Maximum Ratings

Biasing	+5V ± 10%/-5V ± 10%
TTL Control Voltage	0~0.8V/2.8~5V

Ordering Information

Part No.	ECCN	Description
DBSA0804000800B	EAR99	SP8T 4-8GHz 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)

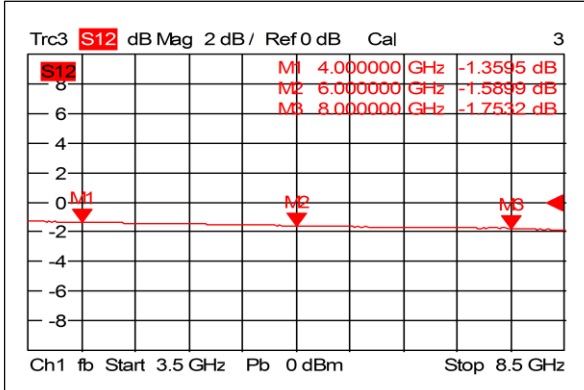
Truth Table

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

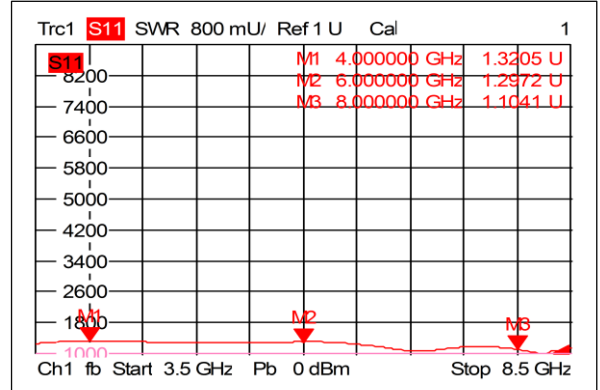
Control Pin Customization available upon request



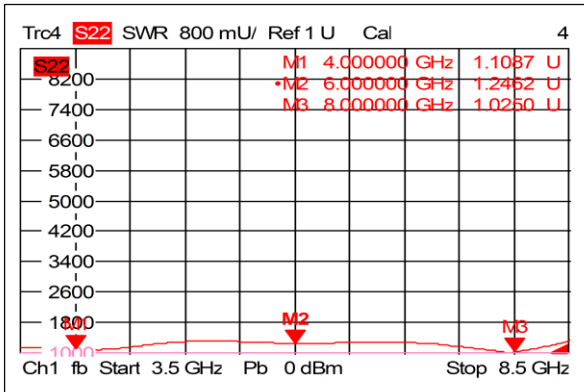
Insertion Loss



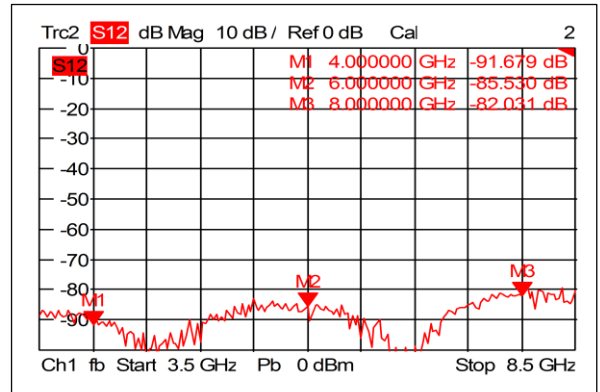
Input VSWR



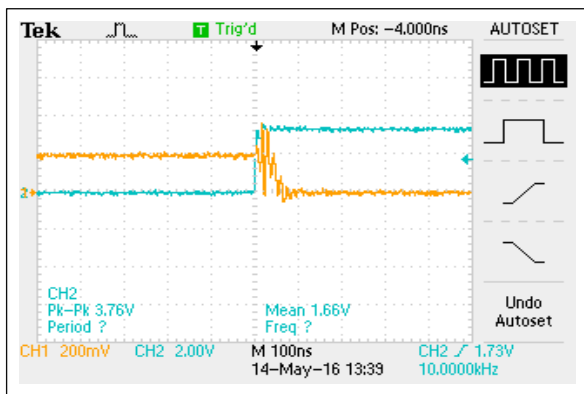
Output VSWR



Isolation



Switching Speed



Switching Speed

