

# Absorptive 2-8GHz Coaxial SPST Switch

### **Features**

- Wide Band Operation 2-8GHz
- · TTL compatible driver include
- · Fast Switching Speed
- · Low Insertion Loss and High Isolation
- Temperature Range -45°C~+85°C
- · Customization available upon request
- Hermetically sealed package up to 60,000 ft available upon request.







- Wireless Infrastructure
- Military & Aerospace
- · Fiber Optics



RF Microwave & VSAT Test Instrument

Parameters	Min	Тур.	Max	Units	
Frequency Range		2-8		GHz	
Insertion Loss		1.0	1.2	dB	
Insertion Loss Temperature Coefficient		0.003		dB/ °C	
Isolation	80	90		dB	
Input VSWR		1.3	1.4		
Output VSWR		1.3	1.4		
RF Input power (CW)	1			W	
Power Dissipation (CW)		0.3		W	
0.1dB Compression P0.1dB		30		dBm	
IM3		40		dBc	
IIP3		50		dBm	
Switching Speed			100	ns	
Weight		0.35		ounces	
Impedance		50		Ω	
Biasing(+5V/-5V)		50/30			
Input /Output Connector		SMA-Female			
Finishing		Gold Plating			
Material		Aluminum			
Seal		Hermetically Sealed (optional)			

Web: www.dbwave.com TOLL: 1-844-432-9283



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### **Absolute Maximum Ratings**

Biasing  $+5V\pm10\%/-5V\pm10\%$ 

TTL Control Voltage 0~0.8V/2~5V

Operating Temperature -45 ~ +85°C

Storage Temperature -55 ~+125°C

## **Ordering Information**

Part No	ECCN	Description
PASA0102000800A	EAR99	SPST 2-8GHz PIN

## Environment specifications

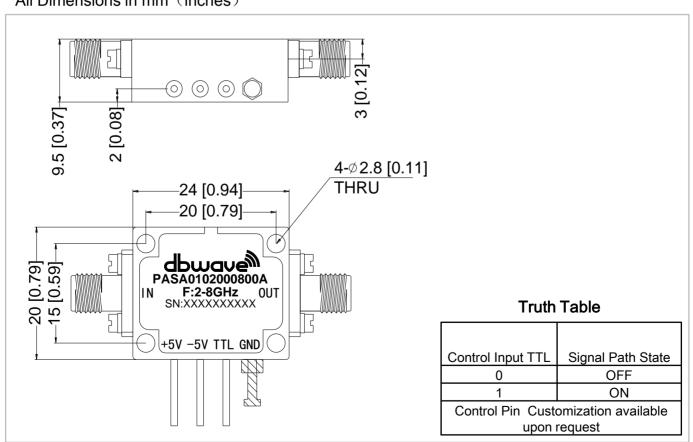
Operational Temperature	-45°C~+85°C
Storage Temperature	-55°C~+125°C
Altitude	30,000 ft. (Epoxy Seal Controlled environment)
(Optional)	60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40°c

20G for 11msc half sin wave,3

axis both directions

# **Outline Drawing:**

All Dimensions in mm (inches)



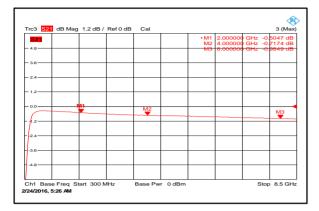
Shock



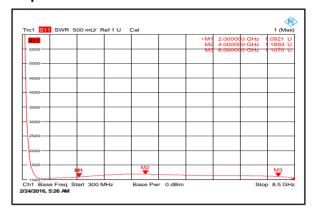
# **DBWAVE TECHNOLOGIES**

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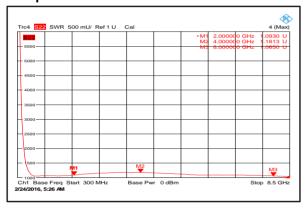
#### **Insertion Loss**



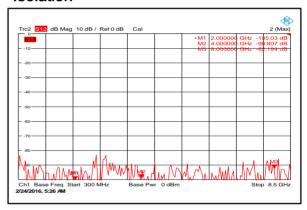
## Input VSWR



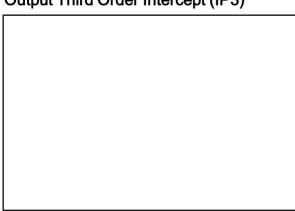
### **Output VSWR**



#### Isolation



## **Output Third Order Intercept (IP3)**



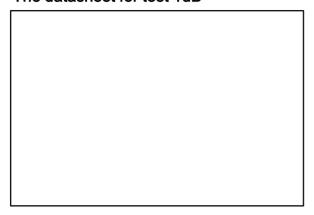
## P1dB vs. Frequency

1 Tub voi i roquonoy					
1					

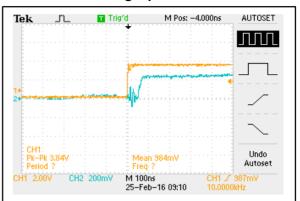


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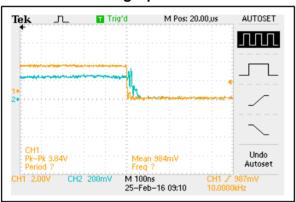
### The datasheet for test 1dB



### Turn on Switching Speed



## **Turn off Switching Speed**



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