

## 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.



## Typical Applications

- Wireless Infrastructure
- Military & Aerospace
- Fiber Optics

RF Microwave & VSAT  
Test Instrument

Parameters	Min	Typ.	Max	Min	Typ.	Max	Units
Frequency Range		2-4			4-8		GHz
Insertion Loss		1.0	1.2		1.3	1.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ °C
Isolation	80	90		80	88		dB
Input VSWR		1.3	1.5		1.3	1.5	
Output VSWR		1.3	1.5		1.3	1.5	
RF Input power (CW)	1			1			W
Power Dissipation (CW)		0.3			0.35		W
0.1dB Compression P0.1dB		30			30		dBm
IM3		40			40		dBc
IIP3		50			50		dBm
Switching Speed			100				ns
Weight			0.69				ounces
Impedance			50				Ω
Biasing(+5V/-5V)			80/50				mA
Input /Output Connector			SMA-Female				
Finishing			Gold Plating				
Material			Aluminum				
Seal			Hermetically Sealed ( optional )				

**Absolute Maximum Ratings**

Biasing	+5V±10%/-5V±10%
TTL Control Voltage	0~0.8V/2~5V
Operating Temperature	-45 ~ +85°C
Storage Temperature	-55 ~+125°C

**Environment specifications**

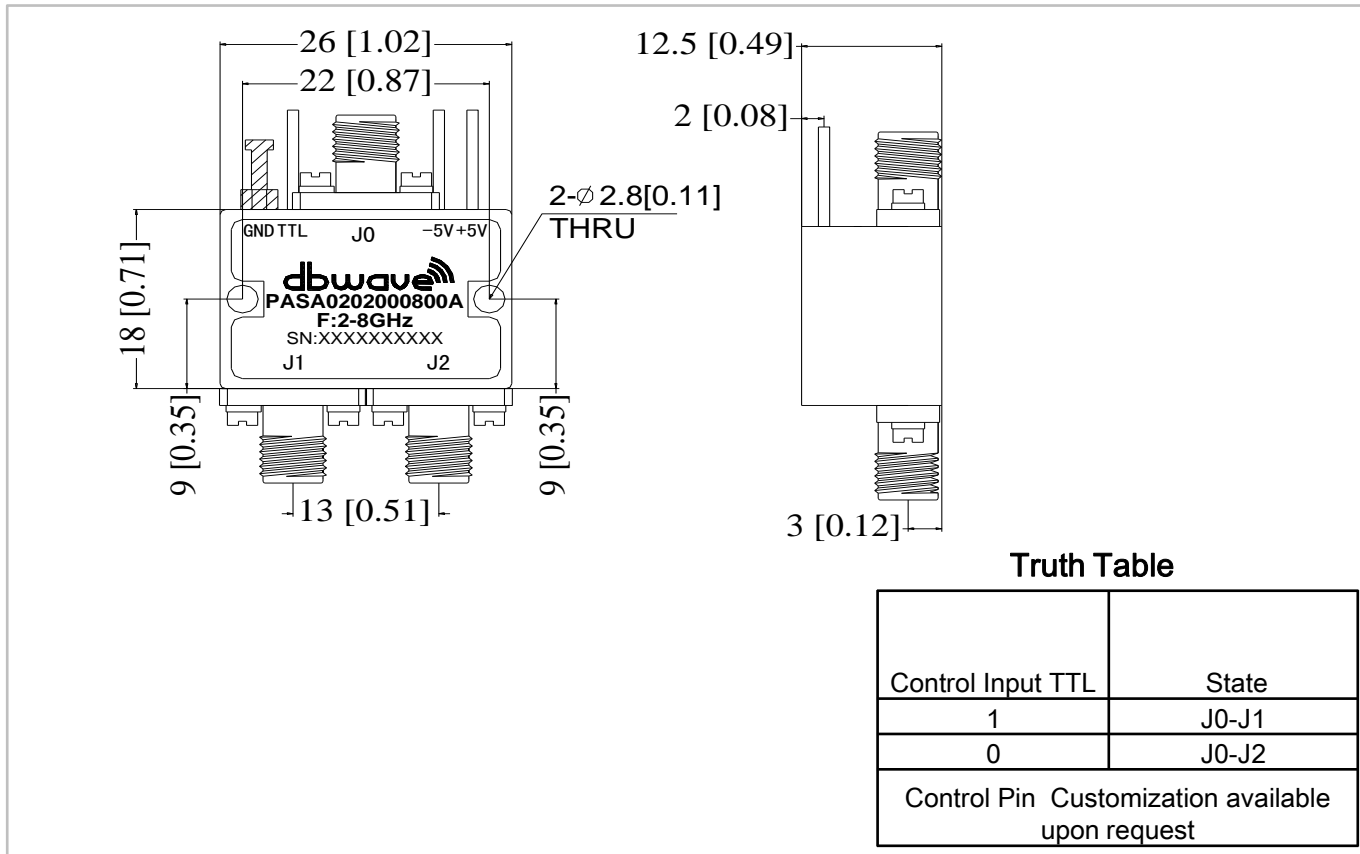
Operational Temperature	-45°C~+85°C
Storage Temperature	-55°C~+125°C
Altitude	30,000 ft. (Epoxy Seal Controlled environment)
(Optional)	60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40°c
Shock	20G for 11msc half sin wave,3 axis both directions

**Ordering Information**

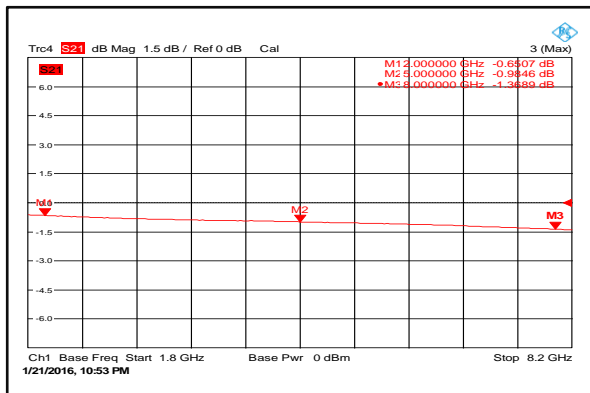
Part No	ECCN	Description
PASA0202000800A	EAR99	SP2T 2-8GHz PIN Diode Switch

**Outline Drawing:**

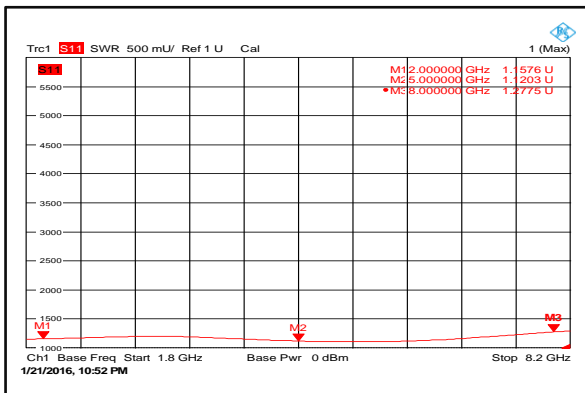
All Dimensions in mm (inches)



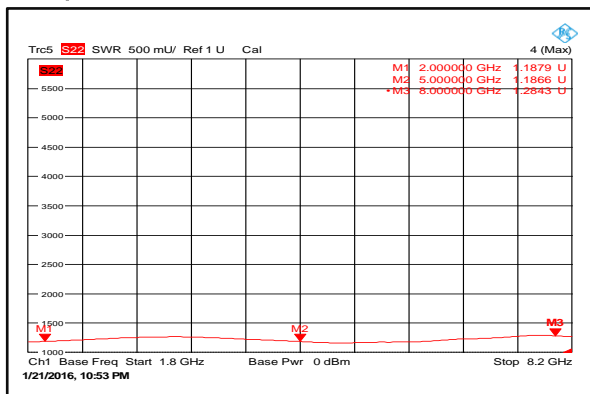
### Insertion Loss



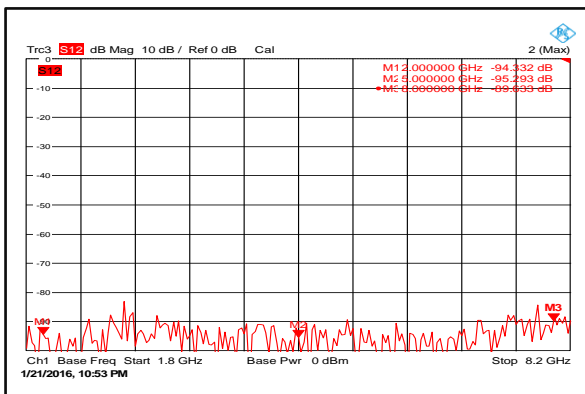
### Input VSWR



### Output VSWR



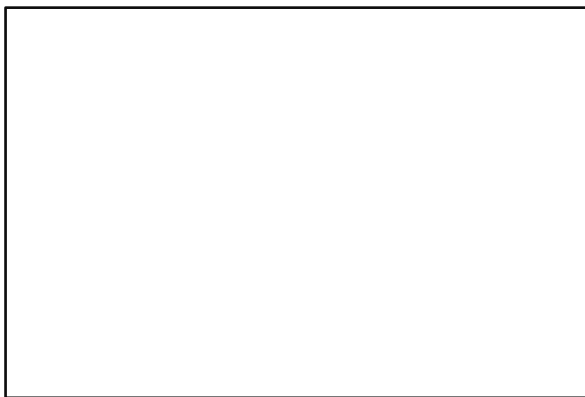
### Isolation



### Output Third Order Intercept (IP3)



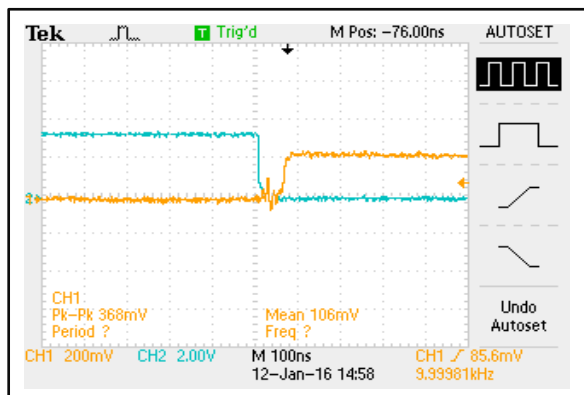
### P1dB vs. Frequency



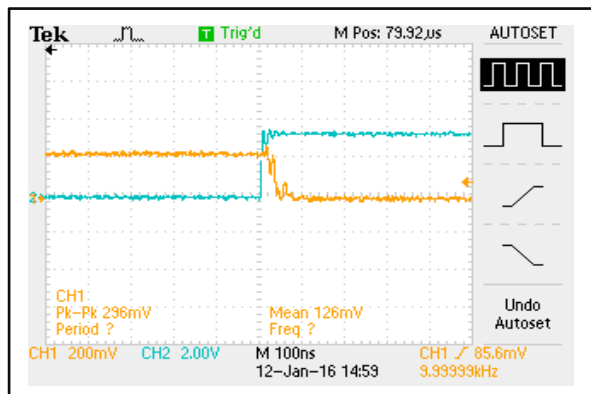
### The datasheet for test 1dB



### Turn on Switching Speed



### Turn off Switching Speed



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