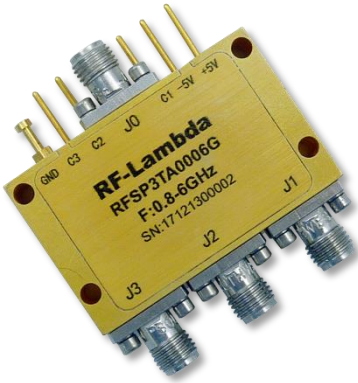




### Absorptive Coaxial SP3T Switch 0.8 - 6GHz



#### Features

- Wide Band Operation 0.8-6GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

Electrical Specifications, TA = +25 °C, Vdd = +5V/-5V , TTL = +5V

Description	PN: RFSP3TA0006G			
	SP3T Absorptive Switch			
	Low Power Cold Switching			
Parameter	Min	Typ.	Max	Units
Frequency Range	0.8~6			GHz
Insertion Loss		1.3	1.6	dB
Insertion Loss Temperature Coefficient		0.003		dB/°C
Isolation	60	75		dB
Input VSWR		1.4	1.5	: 1
Output VSWR		1.4	1.5	: 1
RF Input Power (CW)			30	dBm
DC Power Dissipation		0.85		W
0.1dB Compression Point ( Po.1dB )		30		dBm
IIP3		55		dBm
Switching Speed	100			ns
Weight	1.06			Ounces
Impedance	50			Ω
Bias Current (+5V/-5V)	120/50			mA
Input / Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			



**Absolute Maximum Ratings**

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

Note: TTL pins cannot be connected to the negative voltage otherwise the internal driver will be damaged.

**Ordering Information**

Part No.	ECCN	Description
RFSP3TA0006G	EAR99	SP3T0.8-6GHz PIN Diode Switch

**Environmental Specifications and Test Standards**

Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-45°C~+85°C (Case Temperature)
Storage Temperature		-50°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 Hours
Shock		1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude		Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883	MIL-STD-883 (For Hermetically Sealed Units)



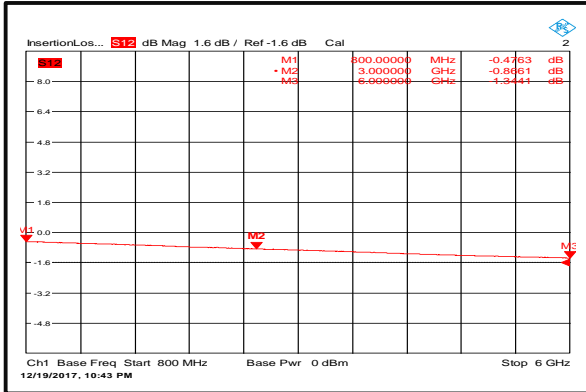
# RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

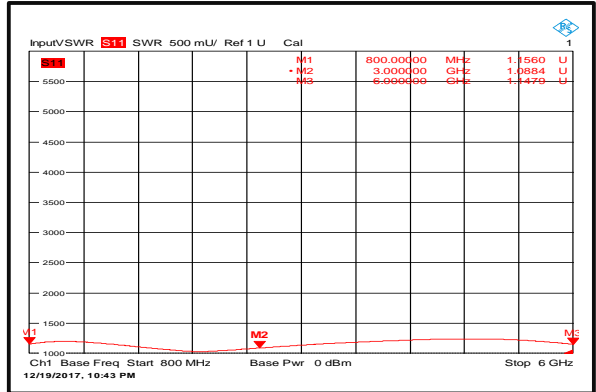
## RFSP3TA0006G

### Typical Performance Plots

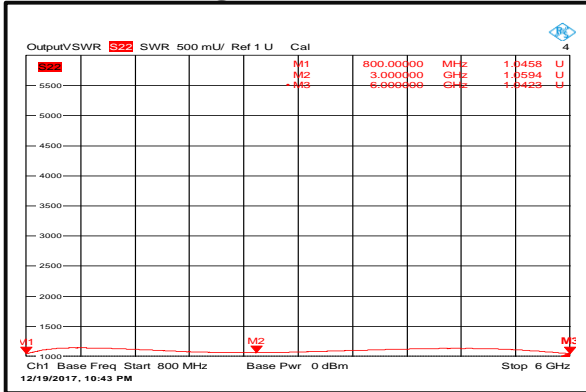
#### Insertion Loss @+25°C



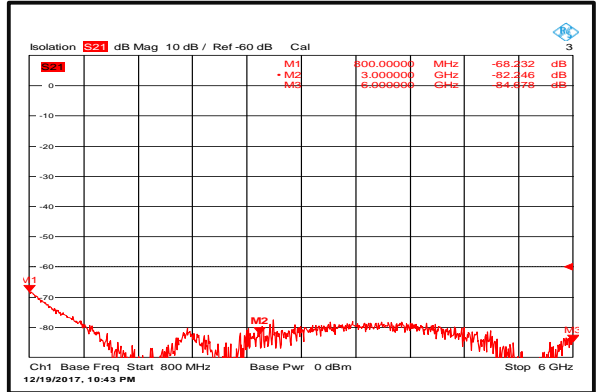
#### Input VSWR @+25°C



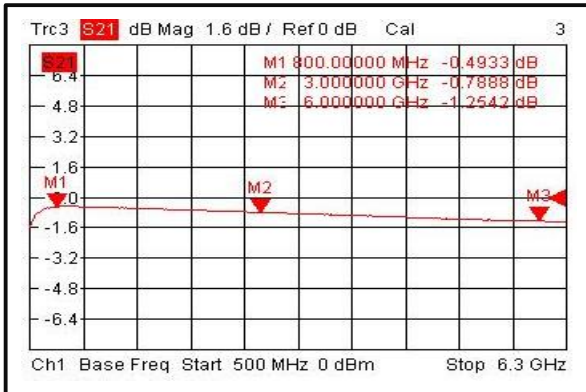
#### Output VSWR @+25°C



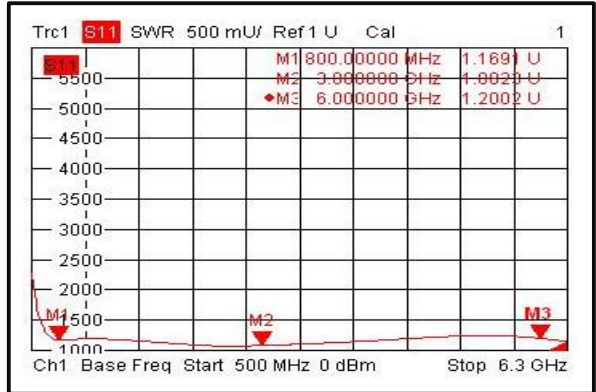
#### Isolation @+25°C



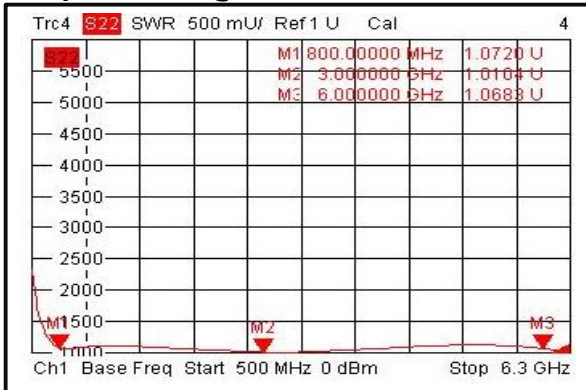
#### Insertion Loss @-45°C



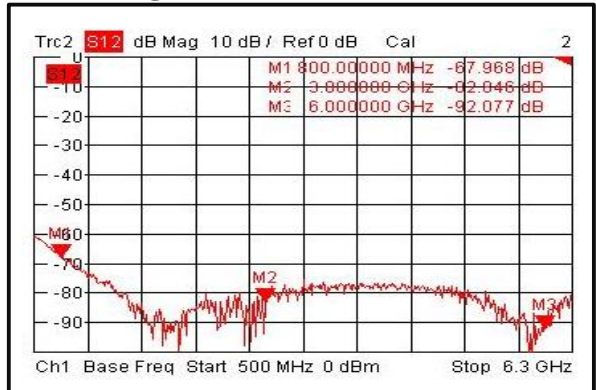
#### Input VSWR @-45°C



#### Output VSWR @-45°C



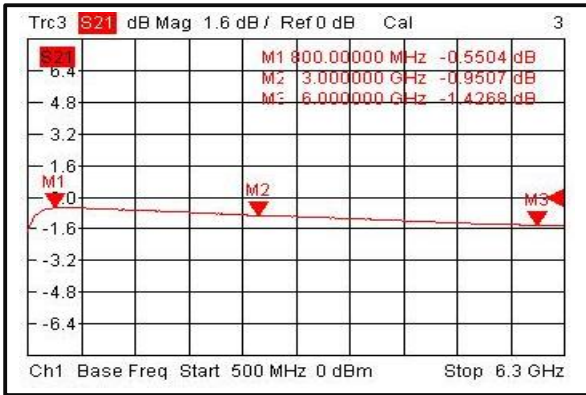
#### Isolation @-45°C



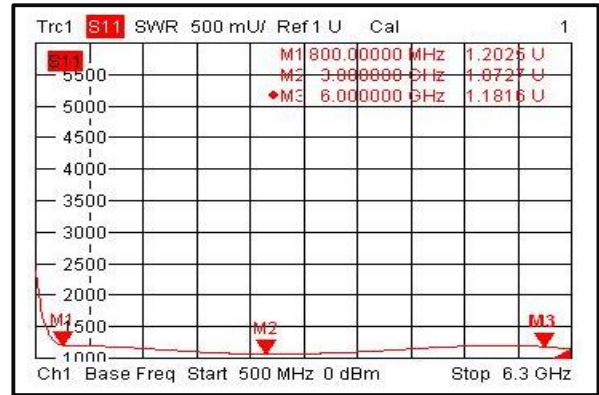
Absorptive Coaxial Single Pole Three Throw Switch 0.8 - 6GHz



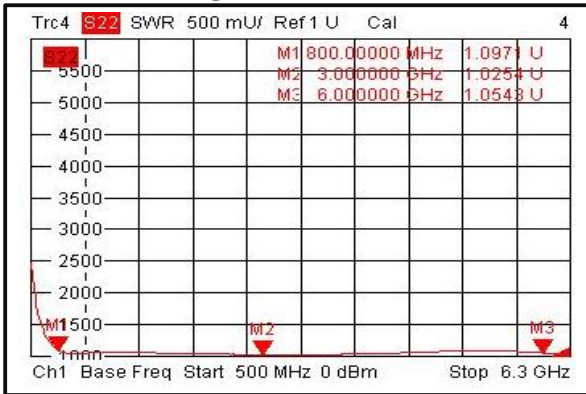
**Insertion Loss @+85°C**



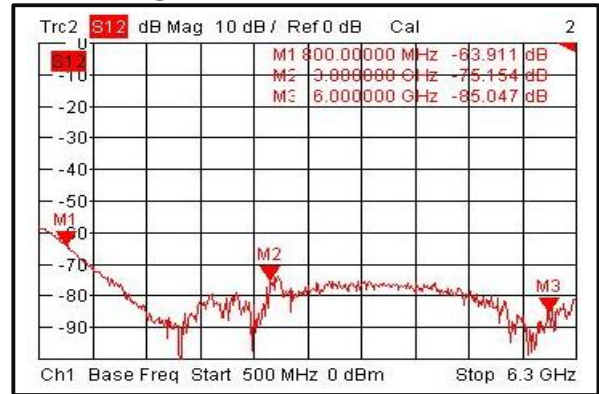
**Input VSWR @+85°C**



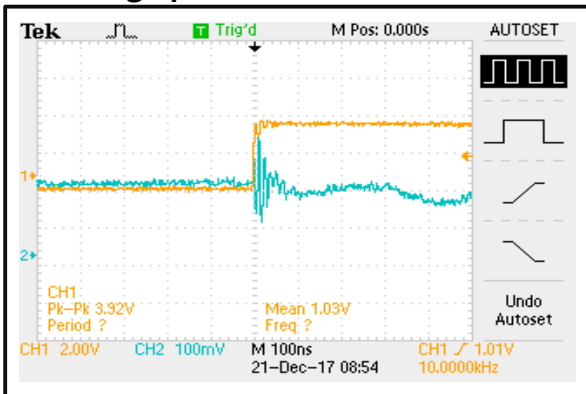
**Output VSWR @+85°C**



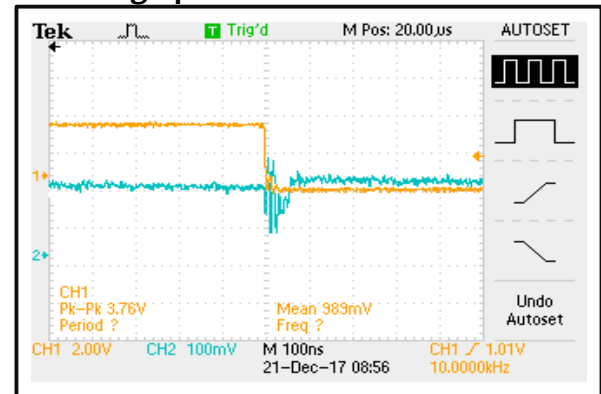
**Isolation @+85°C**



**Switching Speed**



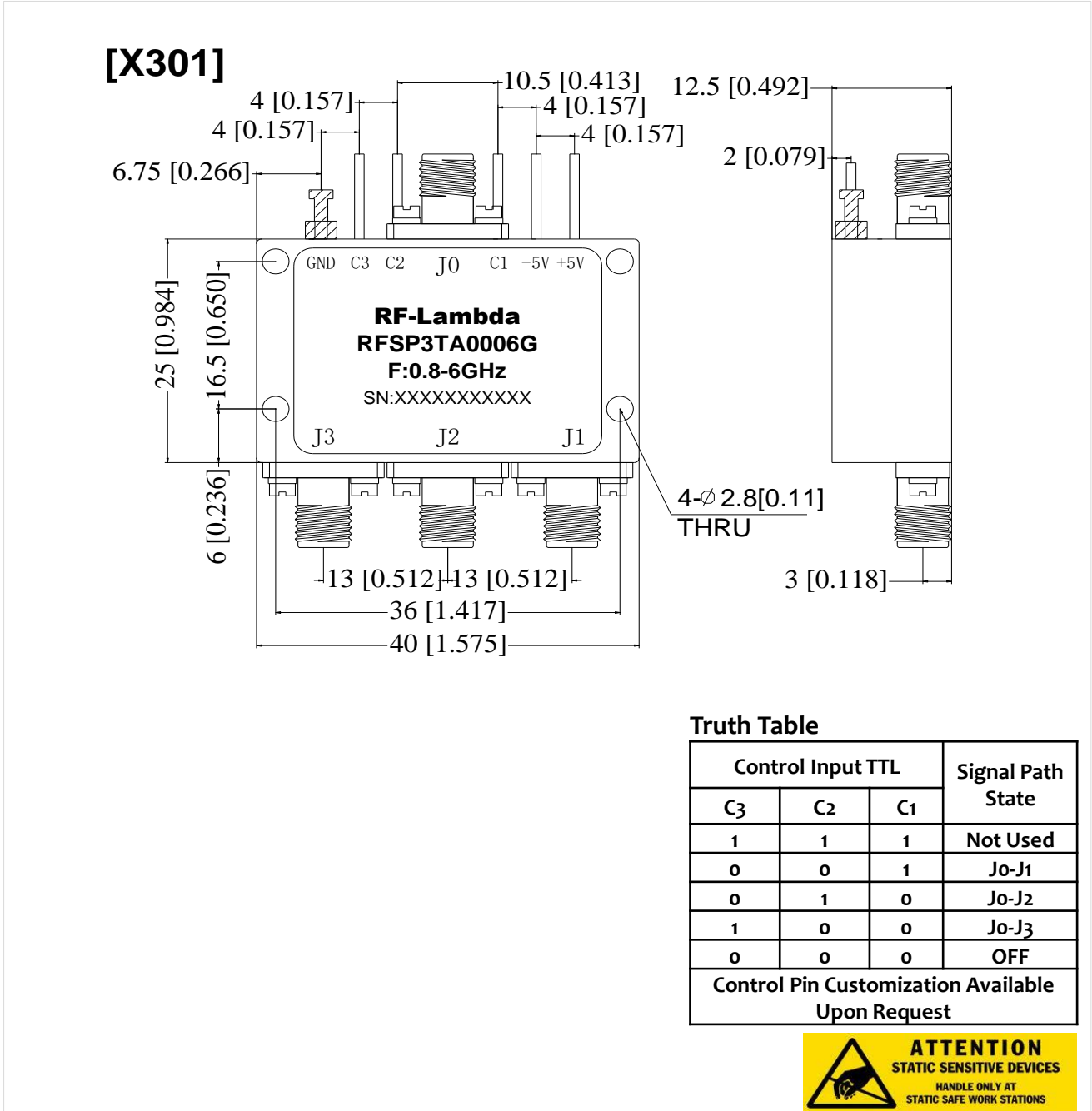
**Switching Speed**





**Outline Drawing:**

All Dimensions in mm [inches]



**Absorptive Coaxial Single Pole Three Throw Switch 0.8 - 6GHz**

**Important Notice**

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