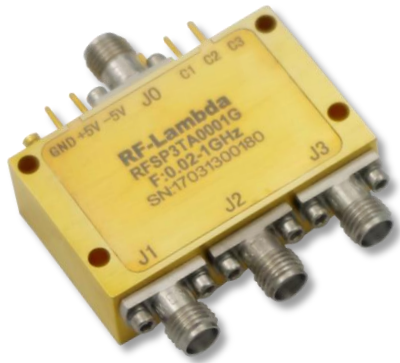




### Absorptive Coaxial SP3T Switch 0.02~1GHz



#### Features

- Wide Band Operation 0.02-1GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

Electrical Specifications,  $T_A = +25\text{ }^\circ\text{C}$ ,  $V_{dd} = +5\text{V}/-5\text{V}$ ,  $TTL = 0 / +5\text{V}$

Description	PN: RFSP3TA0001G			
	SP3T Absorptive Switch			
	Low Power Cold Switching			
Parameters	Min.	Typ.	Max.	Units
Frequency Range	0.02		1	GHz
Insertion Loss		1.2	1.6	dB
Insertion Loss Temperature Coefficient		0.003		dB/°C
Isolation	62	80		dB
Input VSWR		1.3	1.5	:1
Output VSWR		1.3	1.5	:1
RF Input power (CW)			30	dBm
DC Power Dissipation		0.6		W
0.1dB Compression Point (Po.1dB)		30		dBm
IIP3		55		dBm
Switching Speed		200		ns
Weight		0.71		ounces
Impedance		50		$\Omega$
Bias Current (+5V / -5V)		120/50		mA
Input / Output Connectors	SMA - Female			
Finishing	Gold Plating			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			

Absorptive Coaxial Single Pole Three Throw Switch 0.02 - 1GHz



**Absolute Maximum Ratings**

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

**Ordering Information**

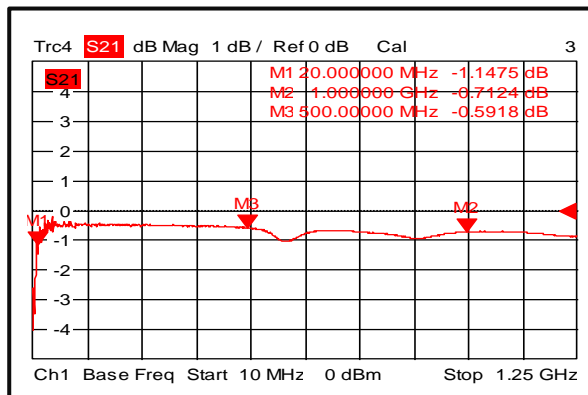
Part No.	ECCN	Description
RFSP3TA0001G	EAR99	SP3T 0.02-1GHz PIN Diode Switch

**Environmental Specifications**

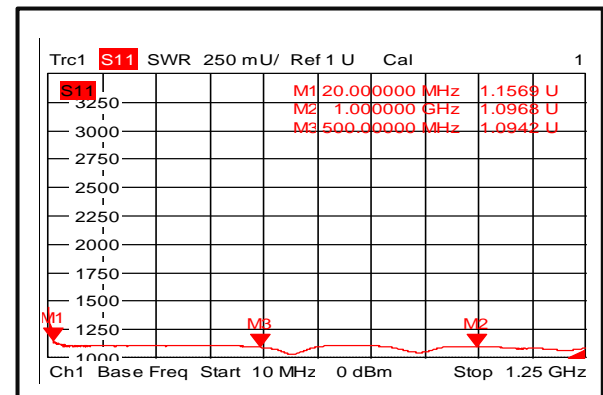
Operational Temperature (°C)	-45 ~ +85
Storage Temperature (°C)	-50 ~ +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

**Typical Performance Plots**

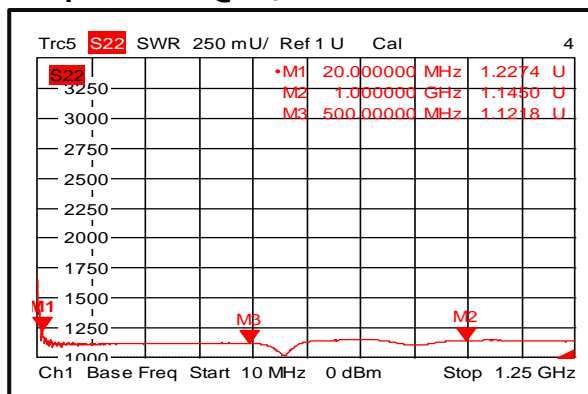
**Insertion Loss @+25°C**



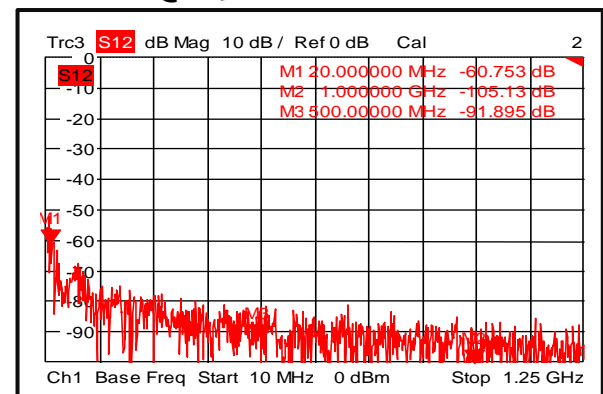
**Input VSWR @+25°C**



**Output VSWR @+25°C**



**Isolation @+25°C**



**Absorptive Coaxial Single Pole Three Throw Switch 0.02 - 1GHz**

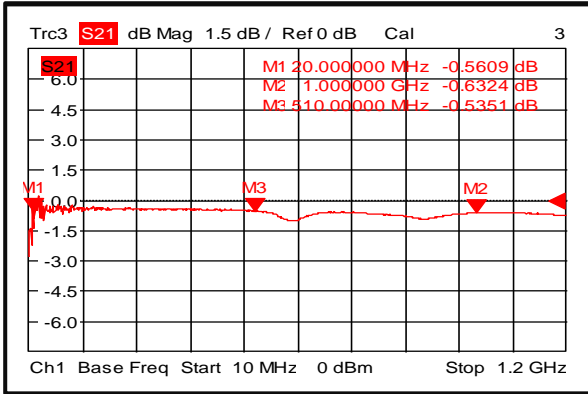


# RF-LAMBDA

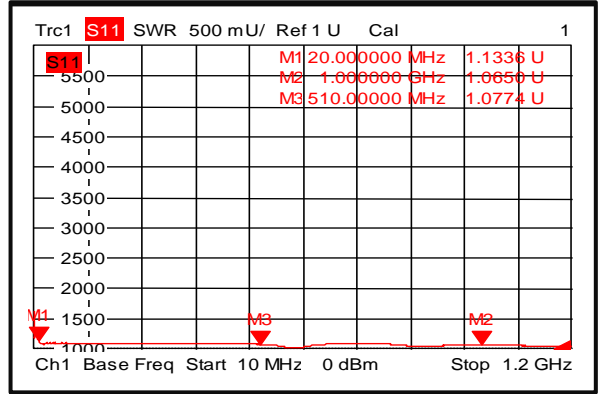
LEADER OF RF BROADBAND SOLUTIONS

## RFSP3TA0001G

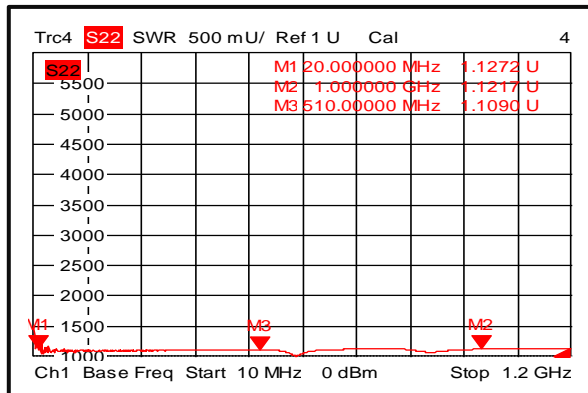
### Insertion Loss @-45°C



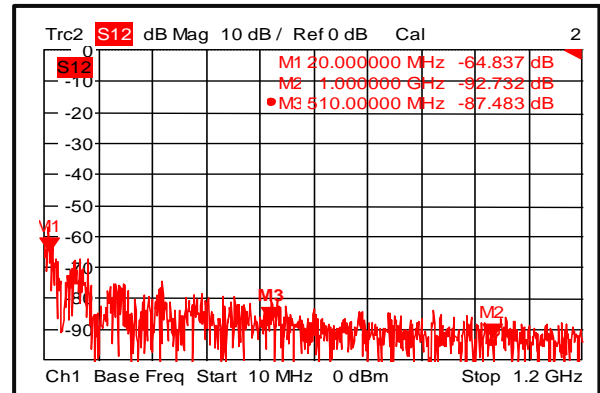
### Input VSWR @-45°C



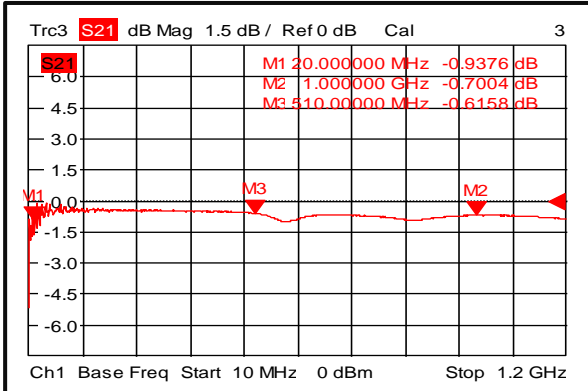
### Output VSWR @-45°C



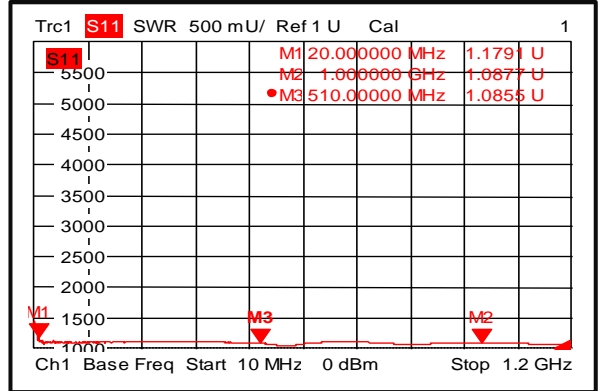
### Isolation @-45°C



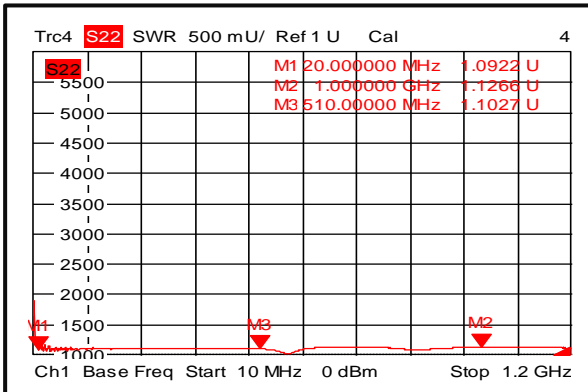
### Insertion Loss @+85°C



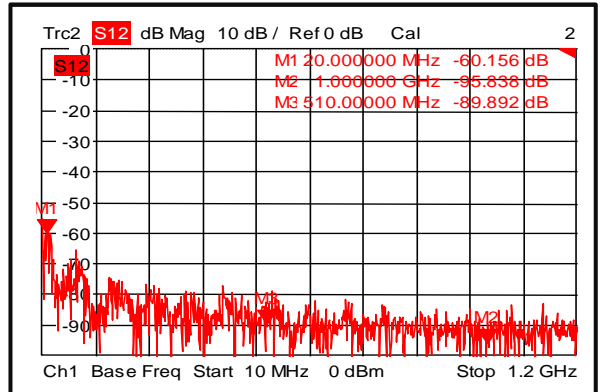
### Input VSWR @+85°C



### Output VSWR @+85°C



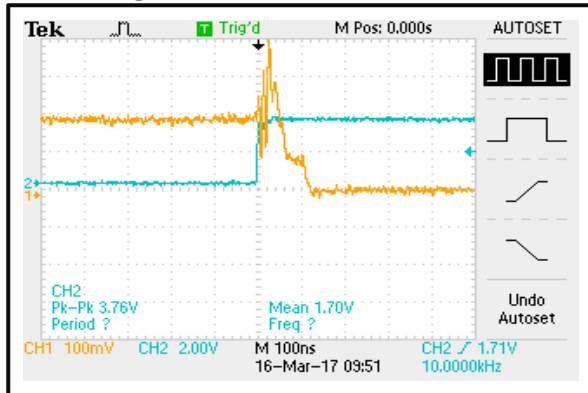
### Isolation @+85°C



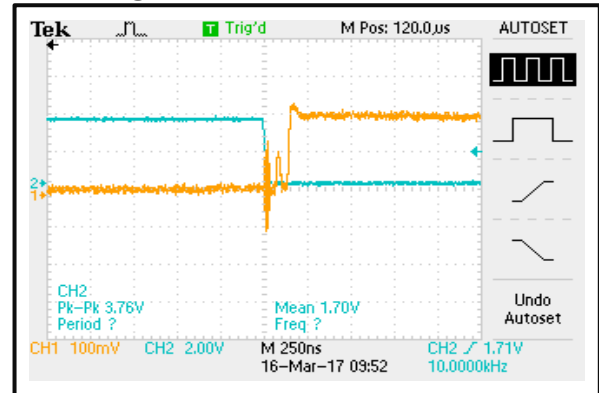
Absorptive Coaxial Single Pole Three Throw Switch 0.02 - 1GHz



**Switching Speed**

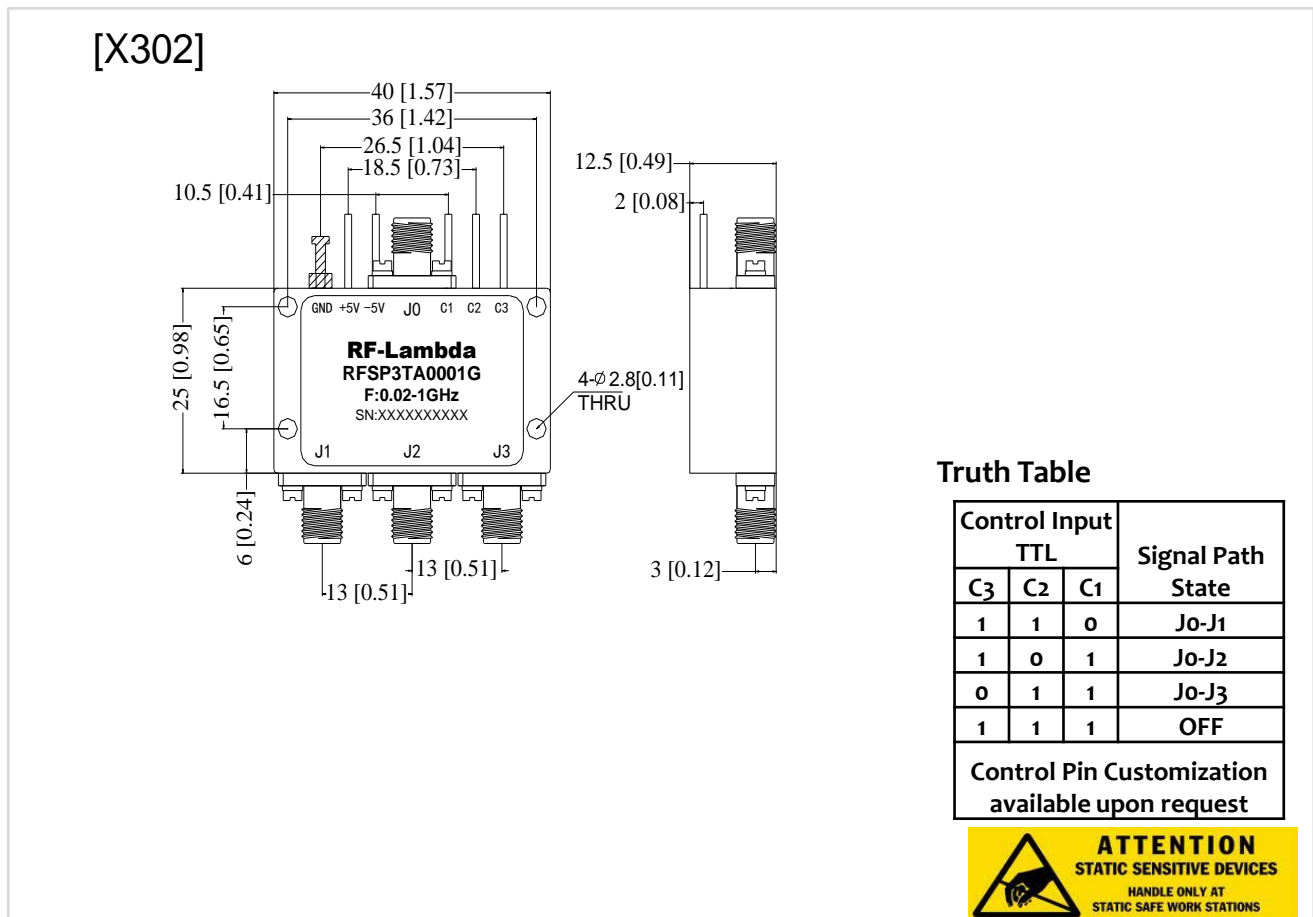


**Switching Speed**



**Outline Drawing:**

All Dimensions in mm [inches]



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**Absorptive Coaxial Single Pole Three Throw Switch 0.02 - 1GHz**