



## Reflective 1-2GHz Coaxial SP2T Switch



### Features

- Wide Band Operation 1-2GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Temperature Range -45°C~+85°C
- Customization available upon request
- Hermetically sealed package up to 60,000ft available upon request.

Electrical Specifications, TA = +25° C, With Biasing +5V, Control TTL= 0/ +5V

Description	PN: RFSP2TR0102GH			
	SP2T Reflective Switch			
	High Power		Cold Switching	
Parameters	Min	Typ	Max	Units
Frequency Range	1-2			GHz
Insertion Loss		0.8	1.5	dB
Insertion Loss Temperature Coefficient		0.003		dB/°C
Isolation	40	42		dB
Input VSWR		1.4	1.5	
Output VSWR		1.4	1.5	
Input Power			70	W
Input Power Peak (12% duty cycle, 30us pulses)			600	W
DC Power Dissipation (CW)		22		W
0.1dB Compression P <sub>0.1dB</sub>		48		dBm
IIP <sub>3</sub>		55		dBm
Switching Speed			1	us
Weight	7.76			ounces
Impedance	50			Ω
Biasing(+5V)	200			mA
Input /Output Connector	N-Female/N-Female (Standard)			
Finishing	Gray Paint (IP65)			
Material	Aluminum			
Seal	Hermetically Sealed (optional)			

Reflective Coaxial Single Pole Double Throw Switch 1-2GHz



**Absolute Maximum Ratings**

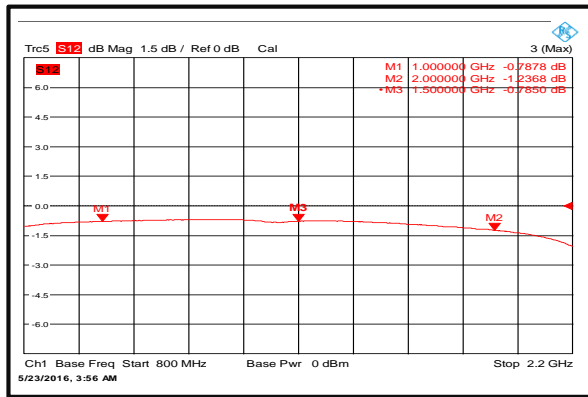
Biasing	+5V±10%
TTL Control Voltage	0~0.8V/2~5V
Operating Temperature(C°)	-45 ~ +85
Storage Temperature(C°)	--50 ~ +125

**Ordering Information**

Part No	ECCN	Description
RFSP2TR0102GH	EAR99	SP2T 1-2GHz PIN Diode Switch

**Typical Performance Plots**

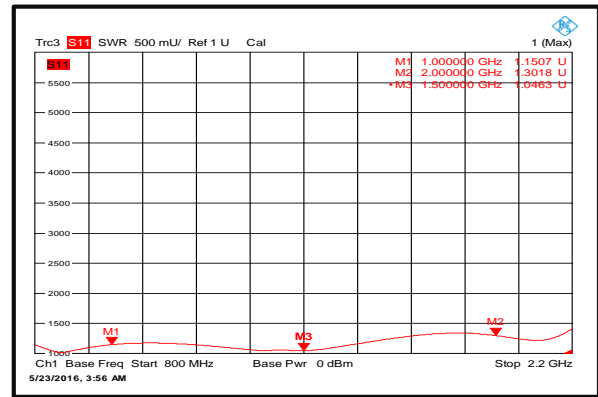
**Insertion Loss**



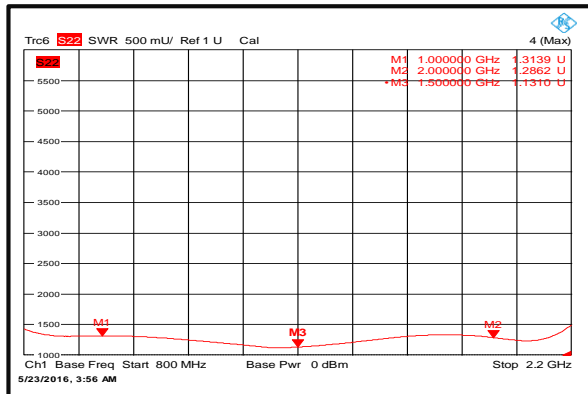
**Environmental Specifications**

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

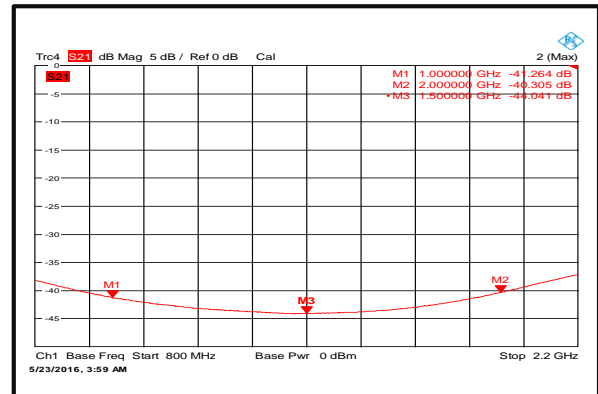
**Input VSWR**



**Output VSWR**



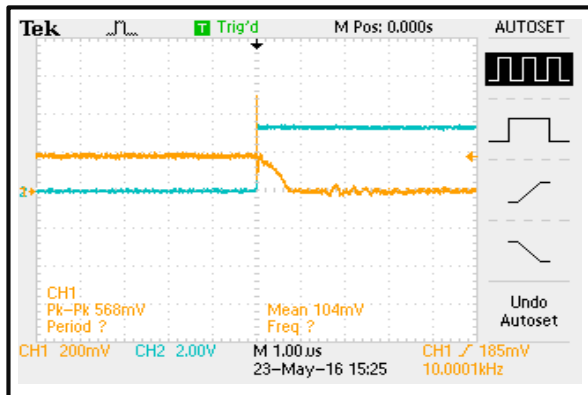
**Isolation**



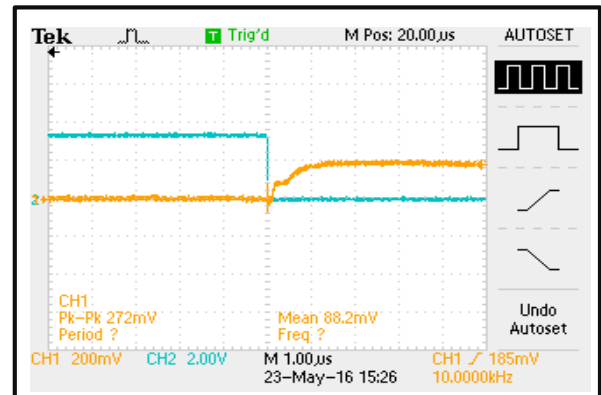
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**Switching Speed**

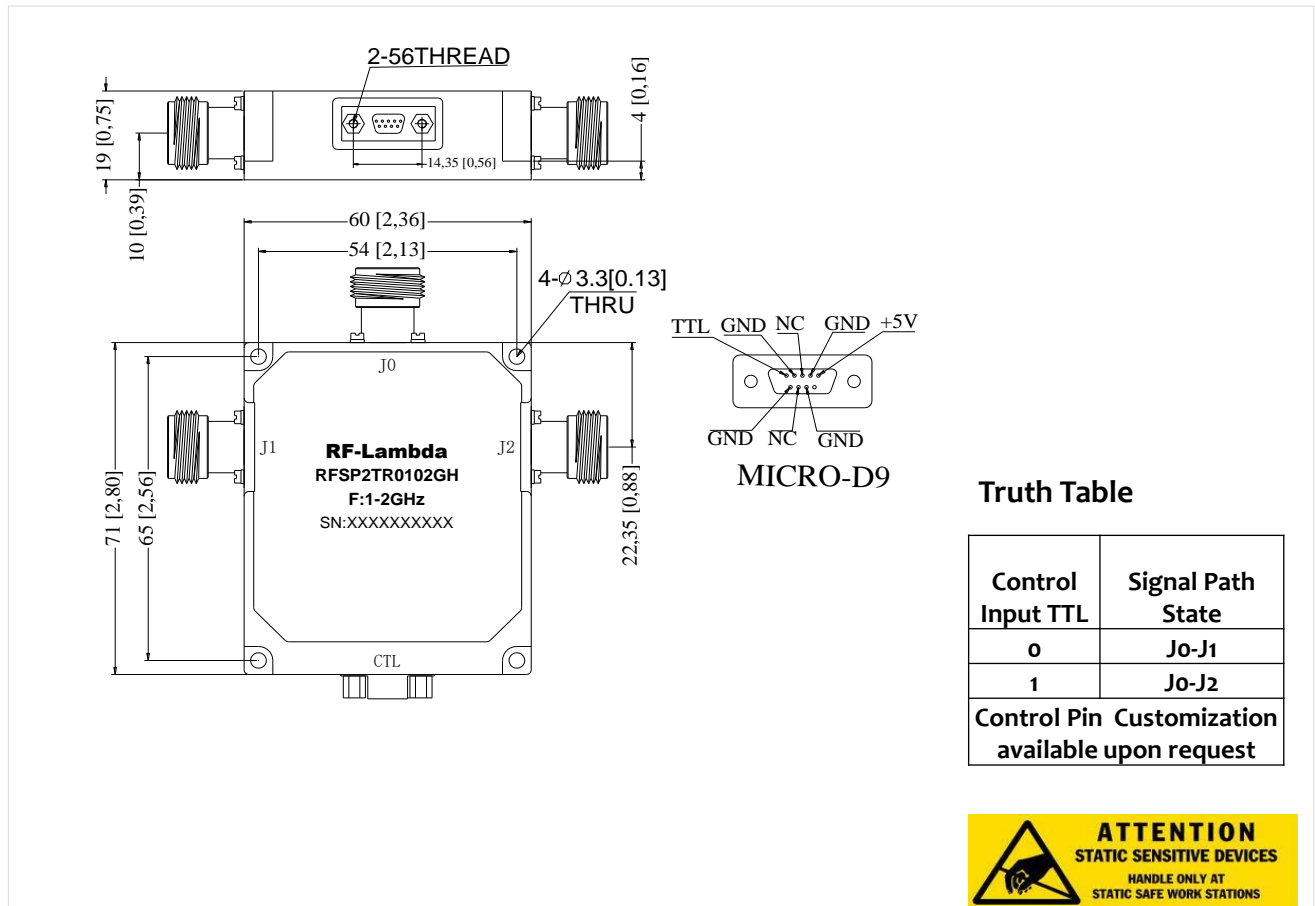


**Switching Speed**



**Outline Drawing:**

All Dimensions in mm ( inches )



**Reflective Coaxial Single Pole Double Throw Switch 1-2GHz**

**Important Notice**

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