



RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFSPSTR0815W50

Reflective Coaxial SPST Switch 0.8 - 1.5GHz



Features

- Wide Band Operation 0.8-1.5GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

Electrical Specifications, TA = +25° C, Vdd=+5V TTL= 0/ +5V

Description	PN: RFSPSTR0815W50			
	SPST Reflective Switch Jo :Reflective J1 :Reflective			
	High Power Cold Switching			
	Parameters	Min.	Typ.	Max.
Frequency Range	0.8		1.5	GHz
Insertion Loss		1.0	1.5	dB
Insertion Loss Temperature Coefficient		0.003		dB/ ° C
Isolation (Jo→J1)	60	75		dB
Input VSWR		1.3	1.5	: 1
Output VSWR		1.3	1.5	: 1
RF Input power (CW)			50	W
DC Power Dissipation		5		W
0.1dB Compression Point (Po.1dB)		47		dBm
IIP3		55		dBm
Switching Speed		1	1.5	us
Weight	1.76			ounces
Impedance	50			Ω
Bias Current (+5V)	100			mA
Input / Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			

Reflective Coaxial Single Pole Single Throw Switch 0.8 - 1.5GHz



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Absolute Maximum Ratings

Biassing	+5V±10%
TTL Control Voltage	0~0.8V/2~5V

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

Ordering Information

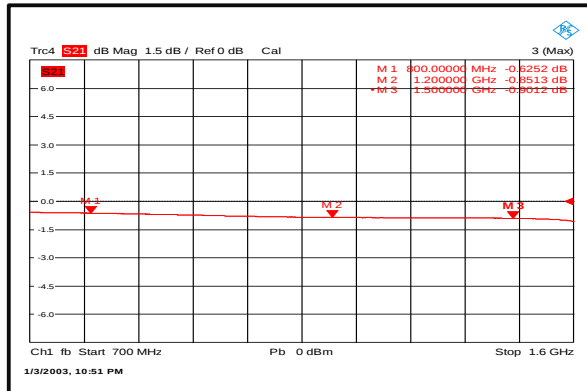
Part No.	ECCN	Description
RFSPSTR0815W50	EAR99	SPST 0.8-1.5GHz PIN Diode Switch

Environmental Specifications

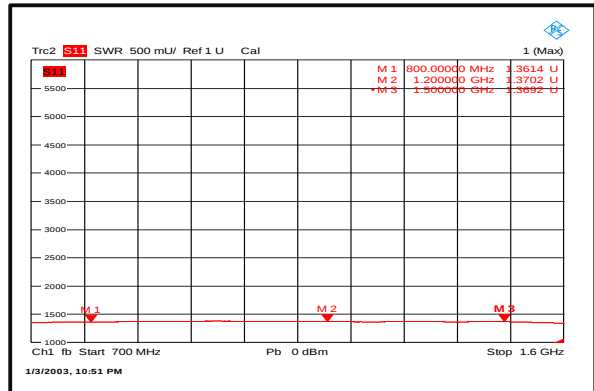
Operational Temperature(°C)	-45 ~ +85
Storage Temperature(°C)	-50 ~ +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C,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

Typical Performance Plots

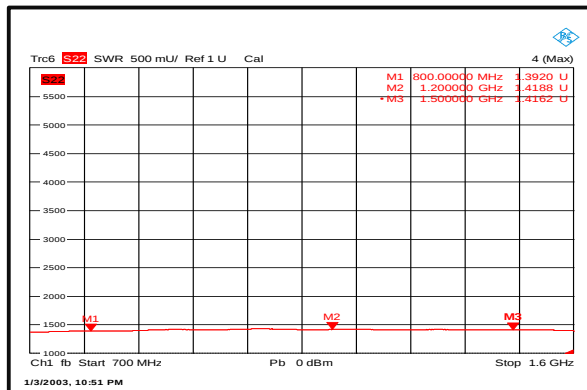
Insertion Loss @+25°C



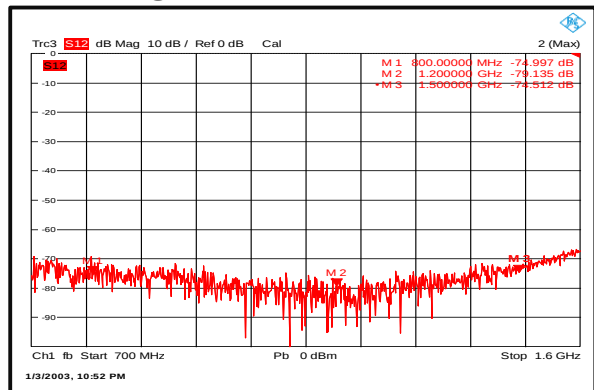
Input VSWR @+25°C



Output VSWR @+25°C



Isolation @+25°C



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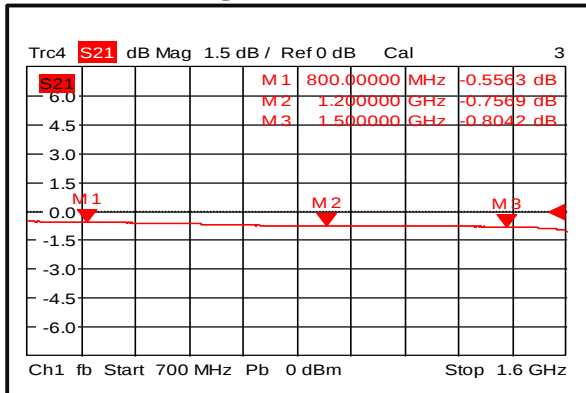


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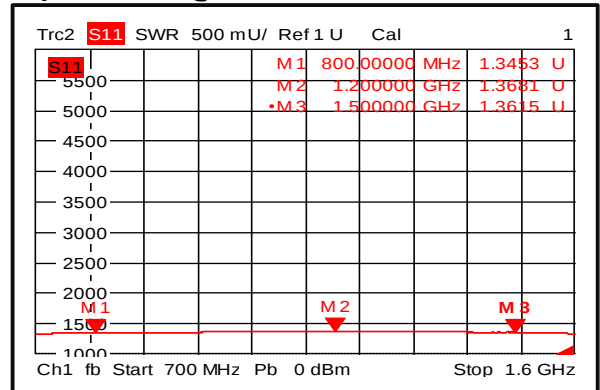
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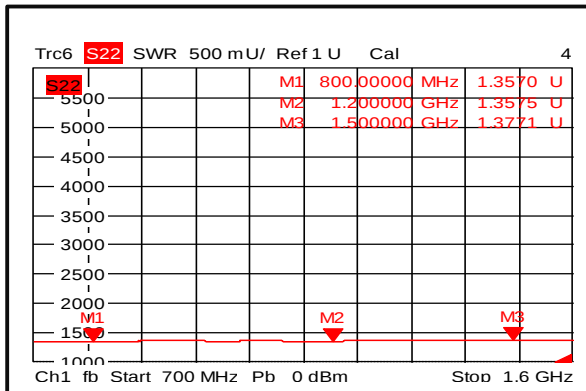
Insertion Loss @-45°C



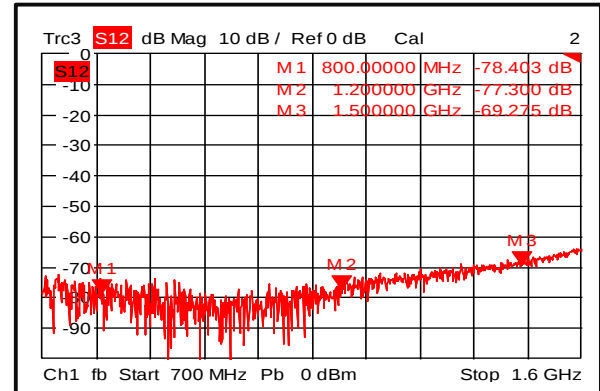
Input VSWR @-45°C



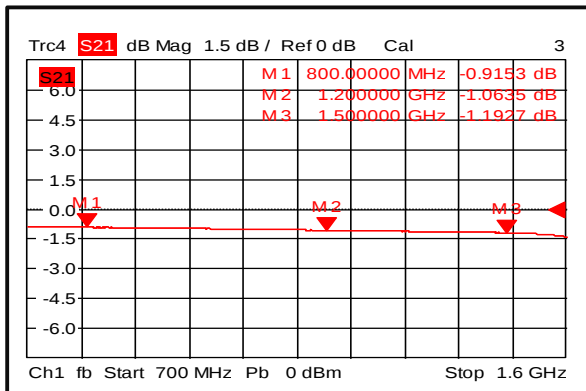
Output VSWR @-45°C



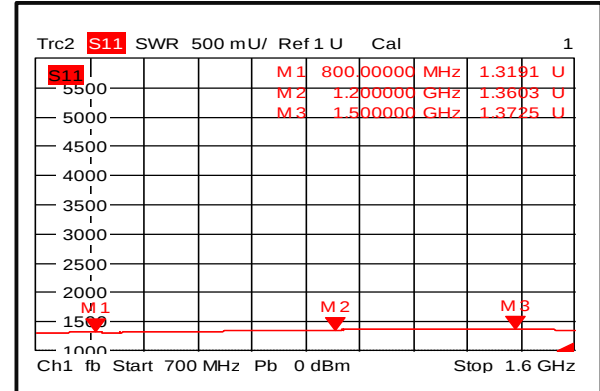
Isolation @-45°C



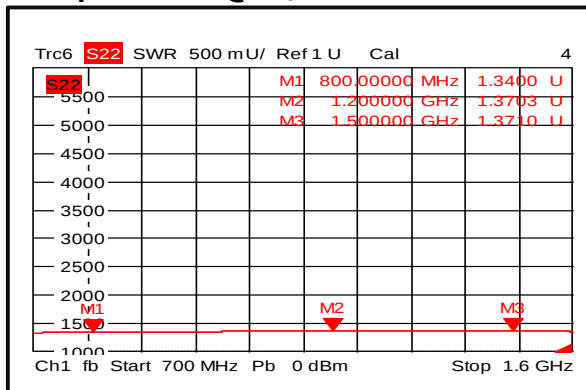
Insertion Loss @+85°C



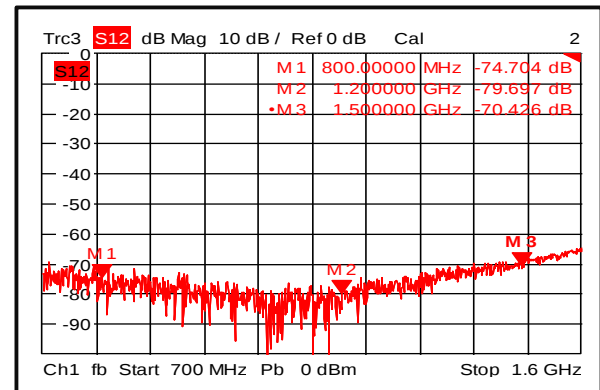
Input VSWR @+85°C



Output VSWR @+85°C



Isolation @+85°C



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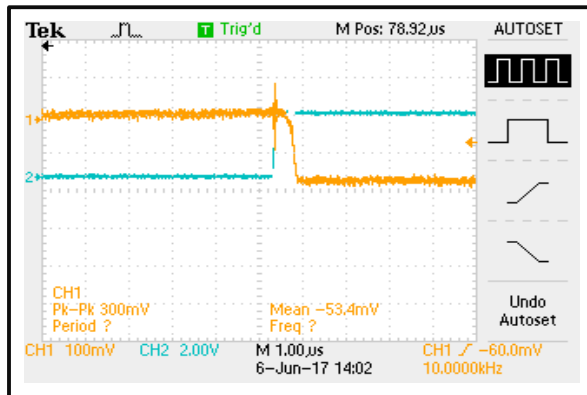


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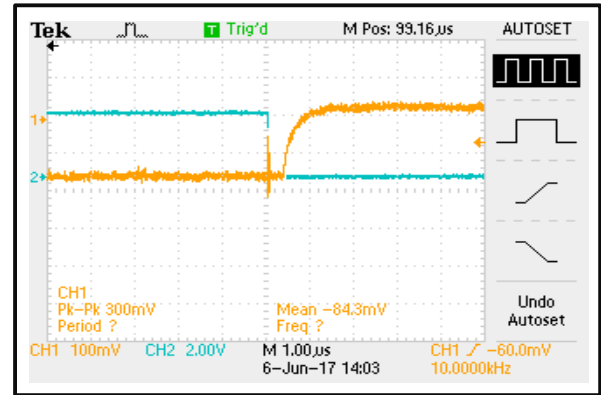
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Switching Speed

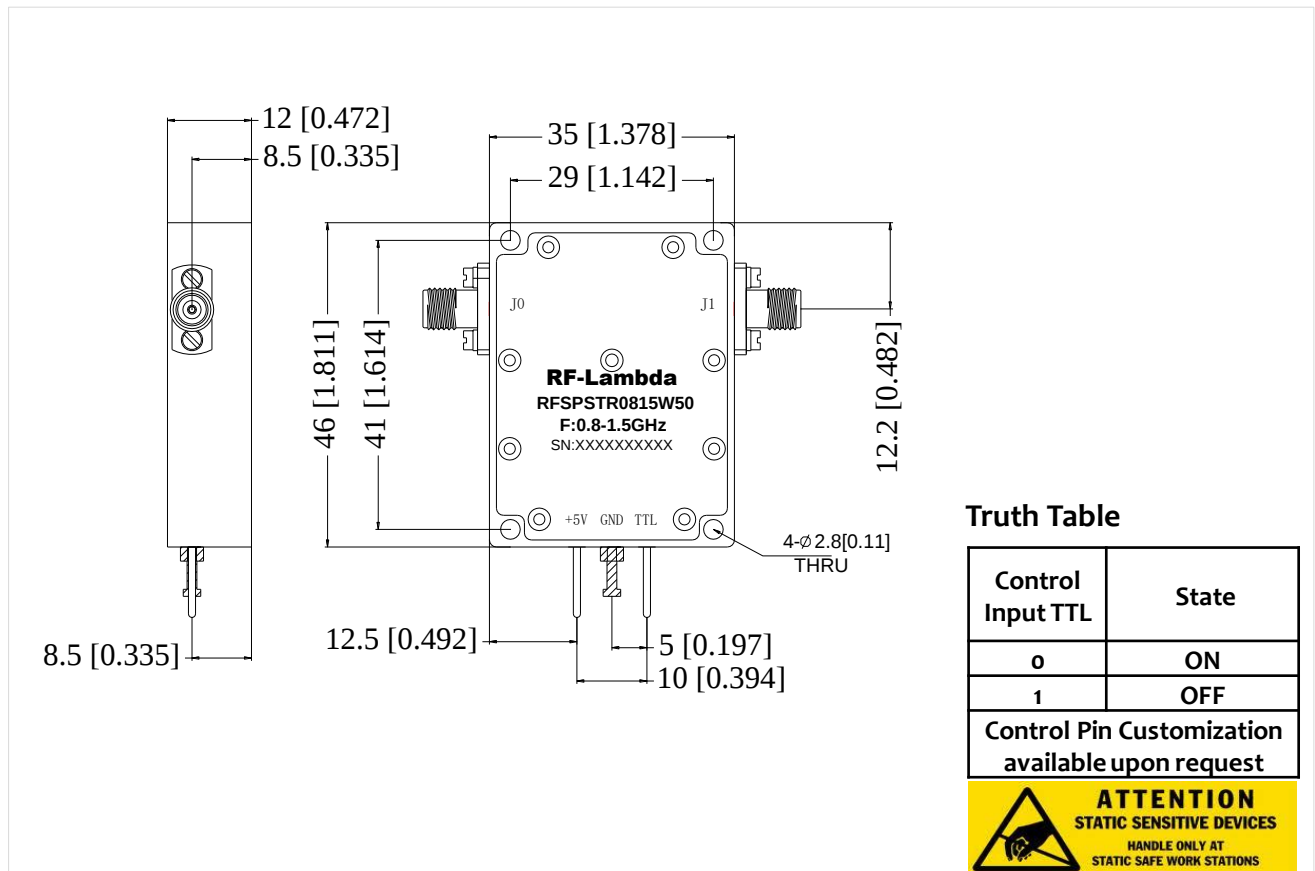


Switching Speed



Outline Drawing:

All Dimensions in mm [inches]



Truth Table

Control Input TTL	State
0	ON
1	OFF

Control Pin Customization available upon request



Important Notice

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