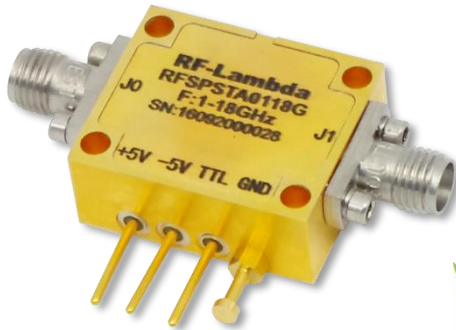




Absorptive Coaxial SPST Switch 1 - 18GHz



Features

- Wide Band Operation 1-18GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request
- Hermetically sealed package up to 60,000ft available upon request.

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

Description	PN: RFSPSTA0118G									
	SPST Absorptive Switch Jo: Absorptive Port J1: Reflective port									
	Low Power Cold Switching									
Parameters	Min	Typ.	Max	Min	Typ.	Max	Min	Typ.	Max	Units
Frequency Range	1-8			8-12			12-18			GHz
Insertion Loss		1.3	1.5		1.5	2.0		2.0	2.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/°C
Isolation (Jo→J1)	80	90		80	90		70	85		dB
Input VSWR		1.5	1.8		1.5	1.8		1.5	1.8	: 1
Output VSWR		1.5	1.8		1.5	1.8		1.5	1.8	: 1
RF Input power			30			30			30	dBm
DC Power Dissipation		0.3			0.3			0.3		W
0.1dB Compression Point (Po.1dB)		30			30			30		dB
IIP3		55			55			55		dBm
Switching Speed	100									ns
Weight	0.35									ounces
Impedance	50									Ω
Bias Current (+5V/-5V)	50/30									mA
Input / Output Connectors	SMA - Female									
Finishing	Gold Plating									
Material	Aluminum									
Sealing	Hermetically Sealed (optional)									



Absolute Maximum Ratings

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

Ordering Information

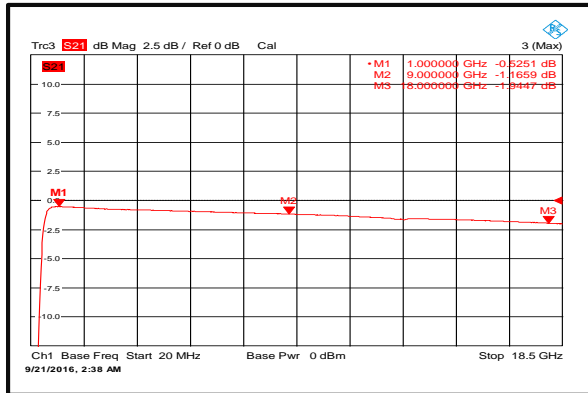
Part No.	ECCN	Description
RFSPSTA0118G	EAR99	SPST 1-18GHz PIN Diode Switch

Environmental Specifications

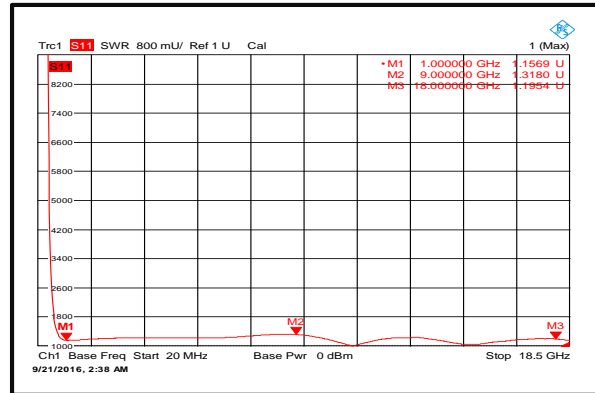
Operational Temperature (°C)	-45 ~ +85
Storage Temperature (°C)	-50 ~ +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Uncontrolled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c,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

Typical Performance Plots

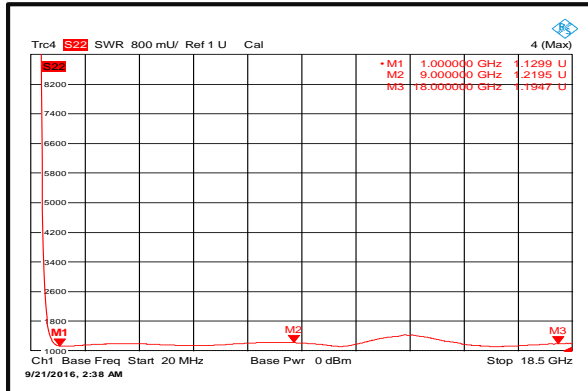
Insertion Loss



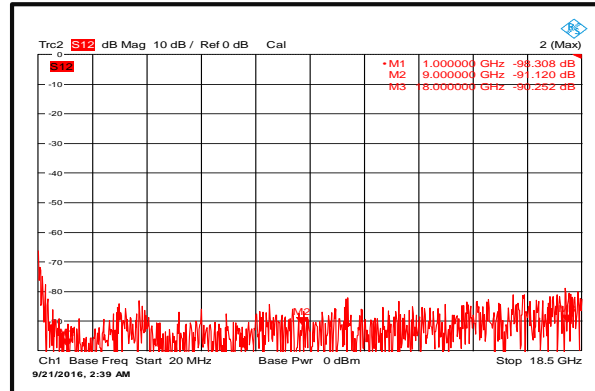
Input VSWR



Output VSWR



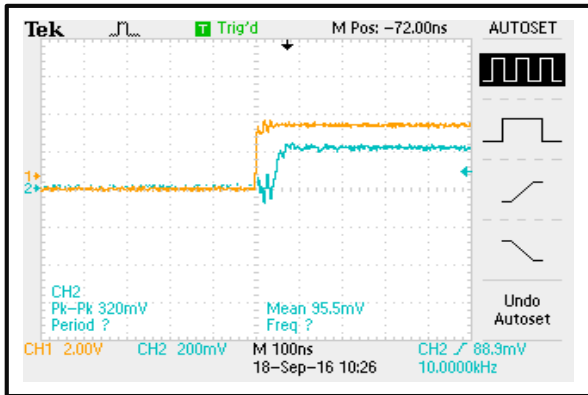
Isolation



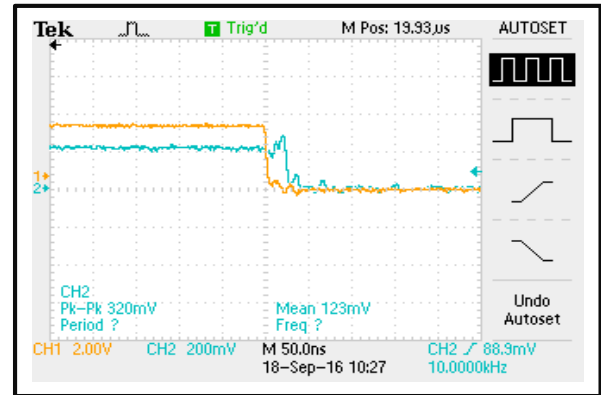
Absorptive Coaxial Single Pole Double Throw Switch 1 - 18GHz



Switching Speed

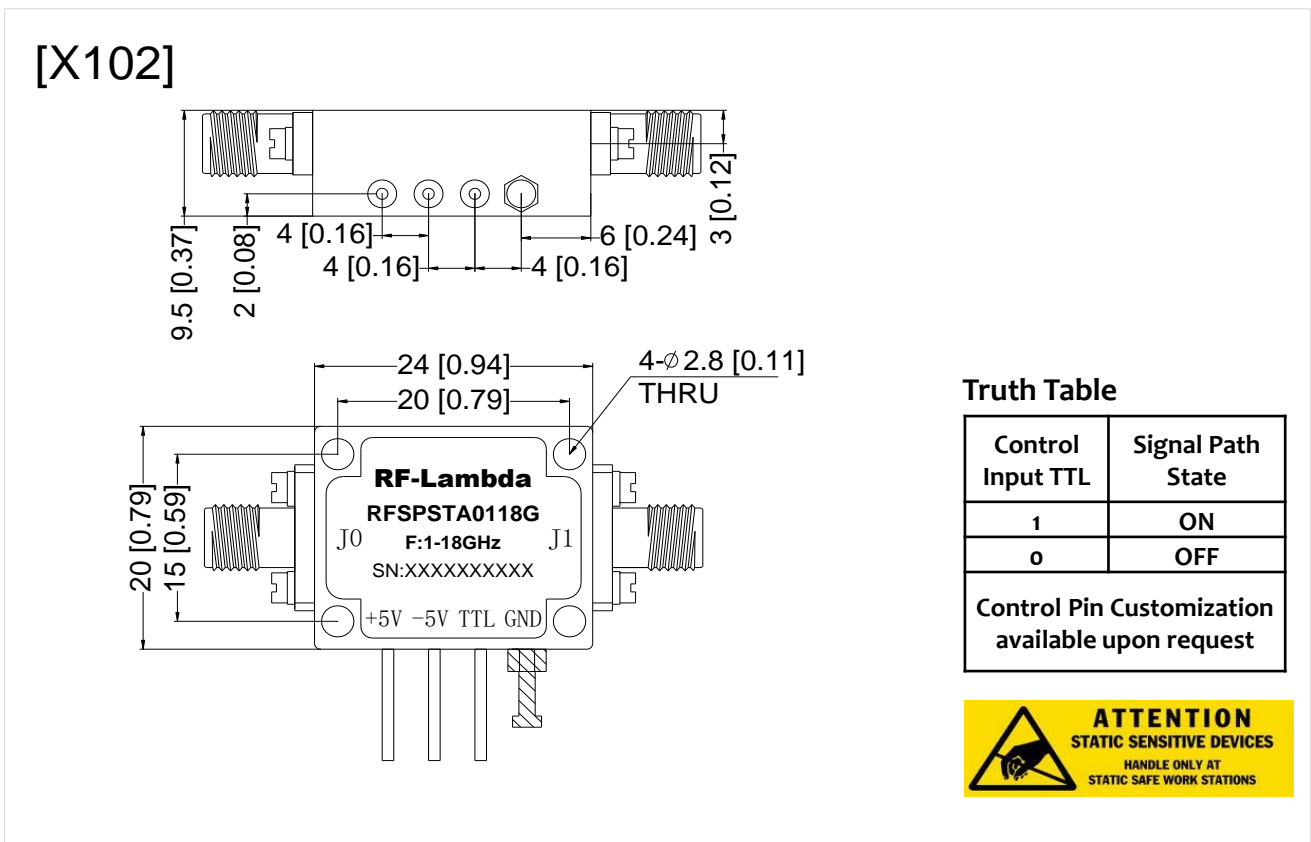


Switching Speed



Outline Drawing:

All Dimensions in mm [inches]



Absorptive Coaxial Single Pole Double Throw Switch 1 - 18GHz

Important Notice

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