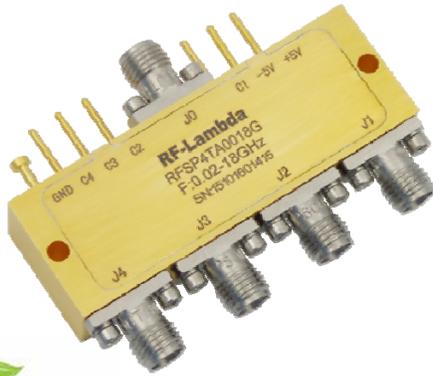




Absorptive 0.02-18GHz Coaxial SP4T Switch



Features

- Ultra Wide Band Operation 0.02-18GHz
- TTL compatible driver include
- 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.

Absorptive Coaxial Single Pole Four Throw Switch 0.02-18GHz

Electrical Specifications, TA = +25° C, With Vdd = +5V, Vss = -5V & VCTL = 0/ +5V

Description	PN: RFSP4TA0018G									
	SP4T Absorptive Switch									
	Low Power Cold Switching									
Parameters	Min	Typ.	Max	Min	Typ.	Max	Min	Typ.	Max	Units
Frequency Range	0.02~6			6~12			12~18			GHz
Insertion Loss		2.5			3.5			4.5		dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/°C
Isolation	60	75		60	70		60	65		dB
Input VSWR		1.8	2		1.6	2		1.6	2	
Output VSWR		1.8	2		1.6	2		1.6	2	
RF Input power	30			30			30			dBm
Power Dissipation (CW)		0.3			0.4			0.5		W
0.1dB Compression Po.1dB		30			30			30		dBm
IM3		40			40			40		dBc
IIP3		50			50			50		dBm
Switching Speed	100									ns
Weight	1.7									ounces
Impedance	50									Ω
Biasing(+5V/-5V)	160/50									mA
Input /Output Connector	SMA-Female/SMA-Female (Standard)									
Finishing	Gold Plating									
Material	Aluminum									
Seal	Hermetically Sealed (optional)									



Absolute Maximum Ratings

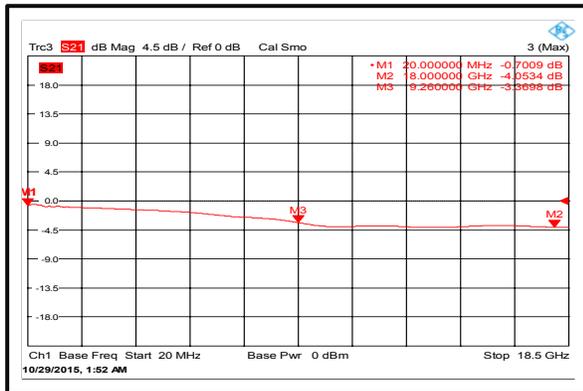
Biassing	+5V±10%/-5V±10%
TTL Control Voltage	0~0.8V/2~5V
Operating Temperature(°C)	-45 ~ +85
Storage Temperature(°C)	-50 ~ +125

Ordering Information

Part No	ECCN	Description
RFSP4TA00018G	EAR99	SP4T 0.02-18GHz PIN Diode Switch

Typical performance plots

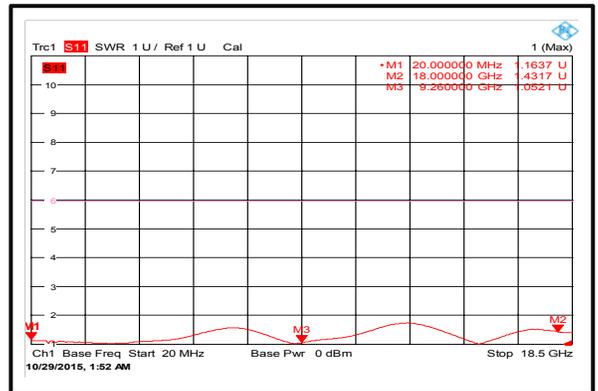
Insertion Loss



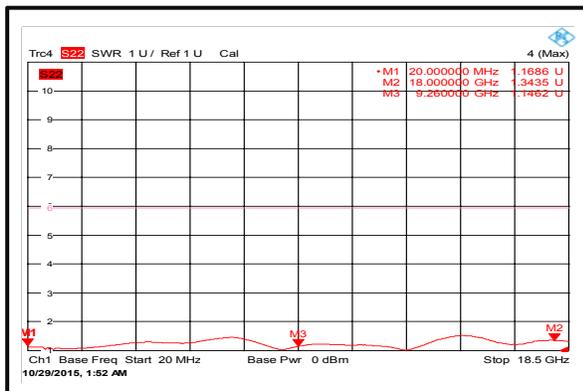
Environment specifications

Operational Temperature (°C)	-45 ~ +85
Storage Temperature (°C)	-50 ~ +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 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°C
Shock	20G for 11msc half sin wave, 3 axis both directions

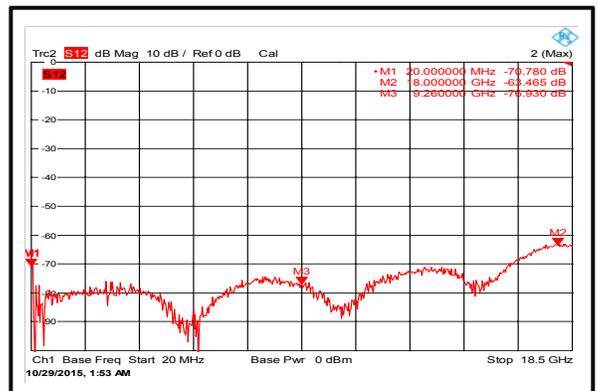
Input VSWR



Output VSWR



Isolation



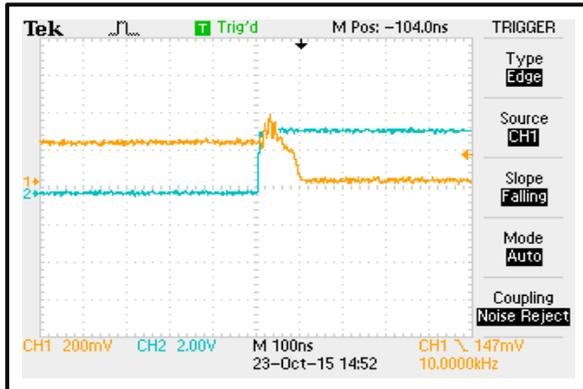


RF-LAMBDA

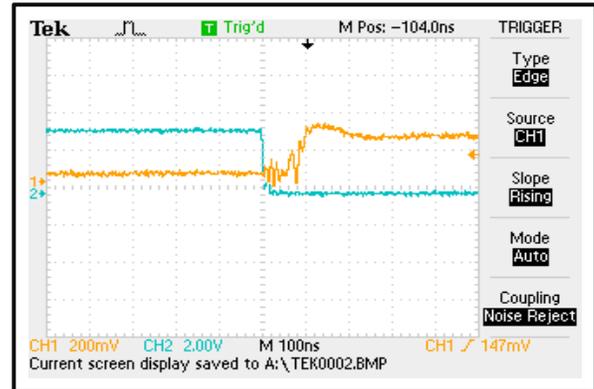
LEADER OF BROADBAND SOLUTIONS

RFSP4TA0018G

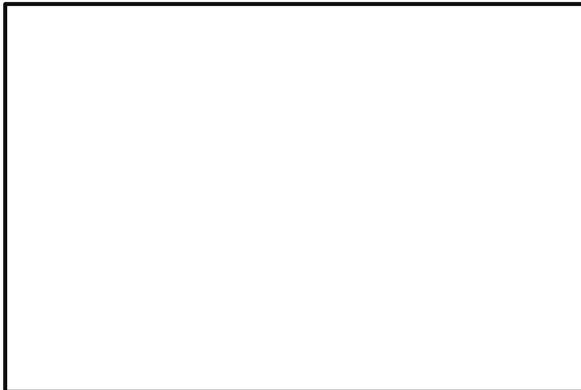
Switching Speed



Switching Speed

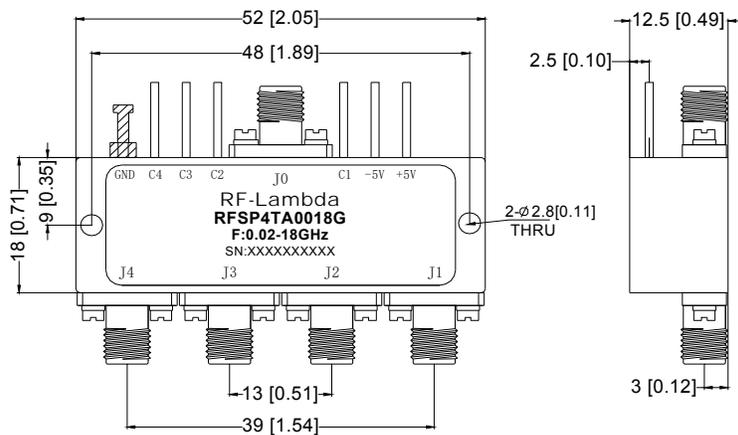


Output Third Order Intercept (IP3)



Outline Drawing:

All Dimensions in mm (inches)



Truth Table

Control				Input TTL	Signal Path
C4	C3	C2	C1		State
1	1	1	1		OFF
1	1	1	0		Jo-J1
1	1	0	1		Jo-J2
1	0	1	1		Jo-J3
0	1	1	1		Jo-J4
0	0	0	0		NC

Control Pin Customization available upon request



Important Notice

The information contained herein is believed to be reliable. RF-Lambda makes no warranties regarding the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for any of the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for the use of the information contained herein. The information contained herein is provided "AS IS, WHERE IS" and with all faults, and the entire risk associated with such information is entirely with the user. All information contained herein is subject to change without notice. Customers should obtain and verify the latest relevant information before placing orders for RF-Lambda products. The information contained herein or any use of such information does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights, whether with regard to such information itself or anything described by such information. RF-Lambda products are not warranted or authorized for use as critical components in medical, life-saving, or life sustaining applications, or other applications where a failure would reasonably be expected to cause severe personal injury or death.

Absorptive Coaxial Single Pole Four Throw Switch 0.02-18GHz