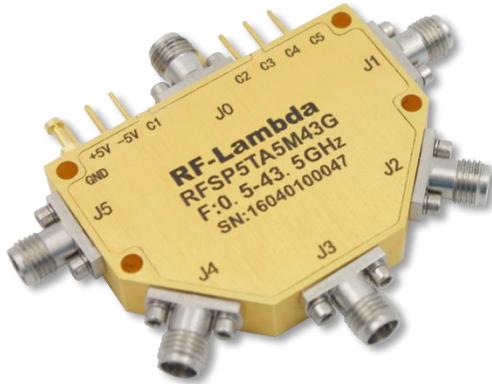




Absorptive 0.5-43.5GHz Coaxial SP5T Switch



Features

- Ultra Wide Band Operation 0.5-43.5GHz
- 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, With Biasing +5V & -5V, Control TTL= 0/ +5V

Description	PN: RFSP5TA5M43G									
	SP5T Absorptive Switch									
	Low Power Cold Switching									
Parameters	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Units
Frequency Range	0.5-18			18-30			30-43.5			GHz
Insertion Loss		3	3.5		3.9	4.5		5.5	6	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/°C
Isolation	60	75		50	55		50	55		dB
Input VSWR		2.0	2.5		2.2	3		2.5	3	
Output VSWR		2.0	2.5		2.2	3		2.2	3	
RF Input power			23			23			23	dBm
DC Power Dissipation		0.5			0.55			0.6		W
0.1dB Compression Po.1dB		23			23			23		dBm
IIP3		50			50			50		dBm
Switching Speed			50			50			50	ns
Weight	1.41									Ounces
Impedance	50									Ω
Biasing(+5V/-5V)	240/50									mA
Input /Output Connector	2.92mm-Female									
Finishing	Gold Plating									
Material	Aluminum									
Seal	Hermetically Sealed (optional)									

Absorptive Coaxial Single Pole Five Throw Switch 0.5-43.5GHz



Absolute Maximum Ratings

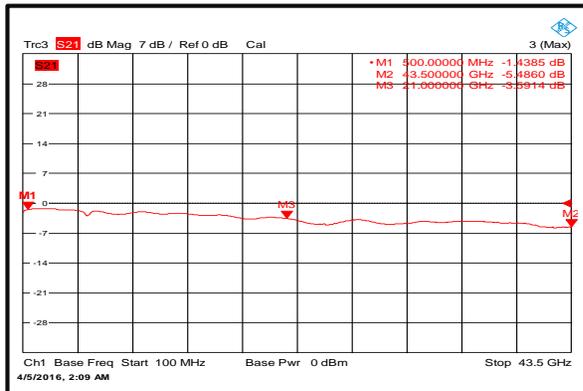
Biassing	+5V±10%/-5V±10%
TTL Control Voltage	0~0.8V/2~5V
Operating Temperature(°C)	-45 ~ +85
Storage Temperature(°C)	-50 ~ +125

Ordering Information

Part No	ECCN	Description
RFSP5TA5M43G	EAR99	SP5T 0.5-43.5PIN Diode Switch

Typical Performance Plots

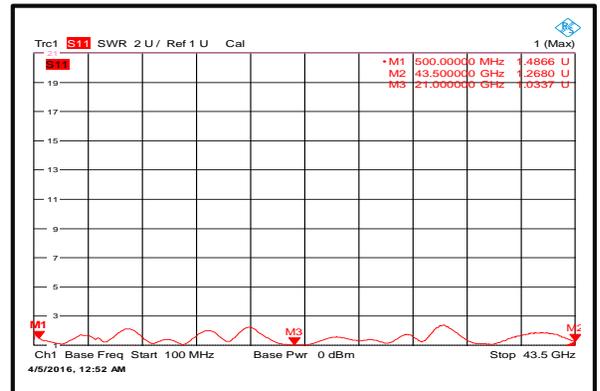
Insertion Loss



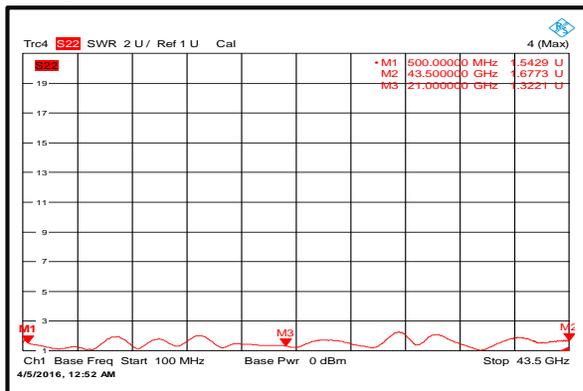
Environmental Specifications

Operational Temperature (°C)	-45 ~ +85
Storage Temperature (°C)	-50 ~ +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 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

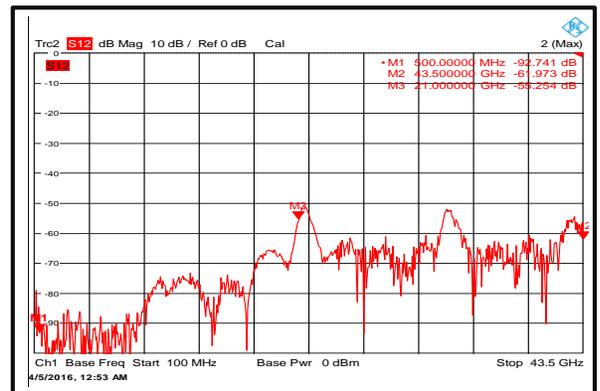
Input VSWR



Output VSWR



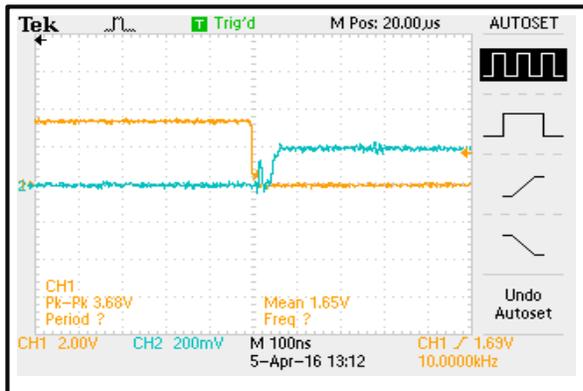
Isolation



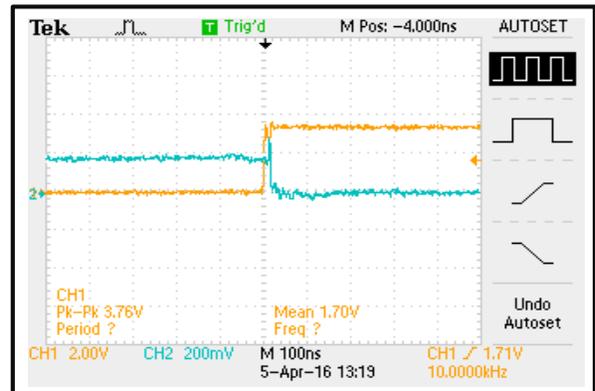
Absorptive Coaxial Single Pole Five Throw Switch 0.5-43.5GHz



Switching Speed

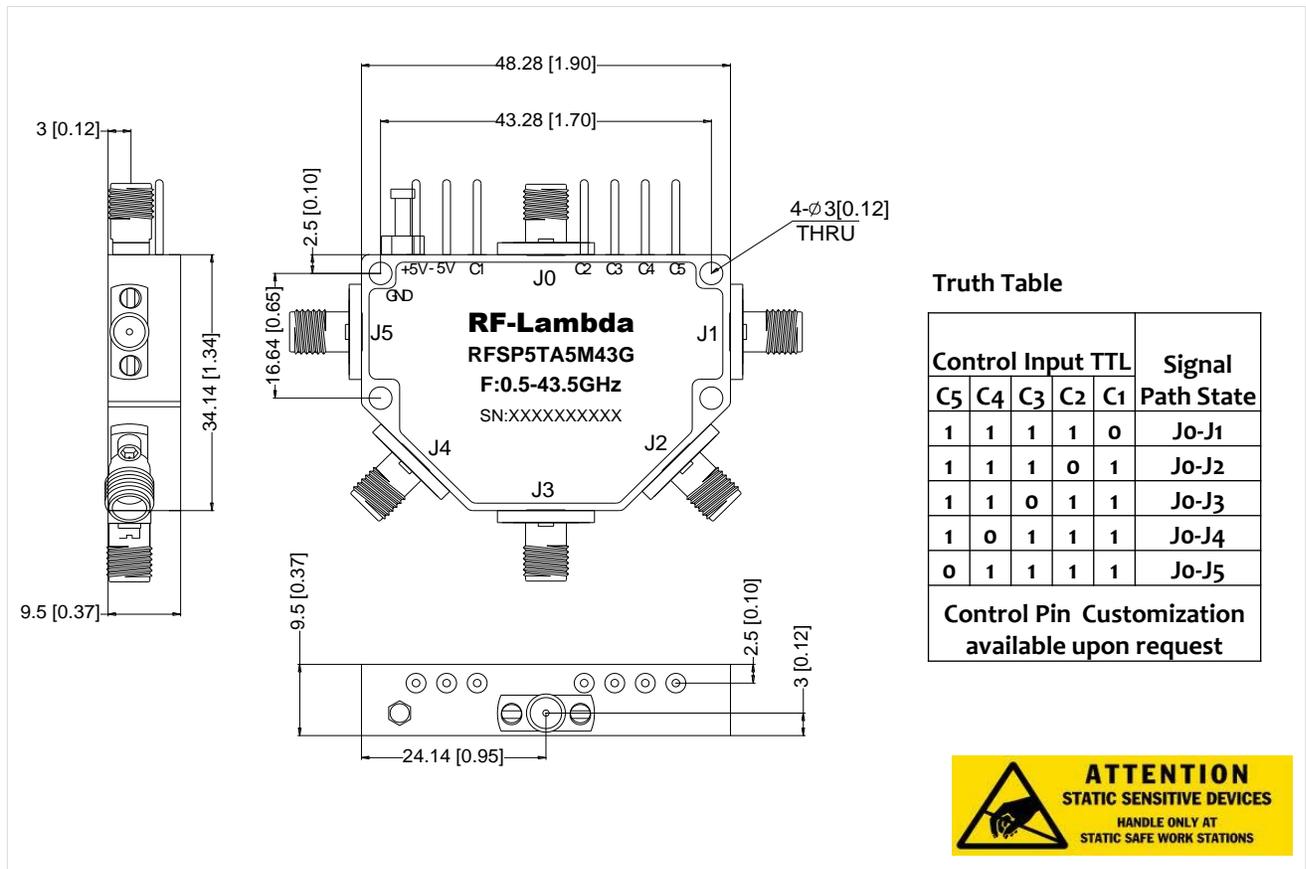


Switching Speed



Outline Drawing:

All Dimensions in mm (inches)



Truth Table

Control Input TTL					Signal Path State
C5	C4	C3	C2	C1	
1	1	1	1	0	Jo-J1
1	1	1	0	1	Jo-J2
1	1	0	1	1	Jo-J3
1	0	1	1	1	Jo-J4
0	1	1	1	1	Jo-J5

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 Five Throw Switch 0.5-43.5GHz