



RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFSP3TA0612GUSB

USB Absorptive Coaxial SP3T Switch 6 – 12GHz



Please refer to the outline drawing



Features

- Wide Band Operation 6-12GHz
- USB Controlled and Powered.
- Low Insertion Loss and High Isolation
- Customization available upon request
- Control SW included.

Typical Applications

- Test and Measurement
- Aerospace and military applications

Electrical Specifications, TA = +25 °C, USB Powered

Description	PN: RFSP3TA0612GUSB			
	SP3T Absorptive Switch			
	Low Power Cold Switching			
Parameters	Min	Typ.	Max	Units
Frequency Range	6-12			GHz
Insertion Loss			2.7	dB
Insertion Loss Temperature Coefficient		0.003		dB/°C
Isolation	60			dB
Input VSWR				: 1
Output VSWR				: 1
RF Input power (CW)			1	W
DC Power Dissipation				W
0.1dB Compression Point (P 0.1dB)				dBm
IIP3				dBm
Weight				ounces
Impedance	50			Ω
Bias Current				mA
Control Interface	USB 2.0 (Control Cable Included)			
Switching Speed	50ns			
Input / Output Connectors	SMA-Female			
Finish	Nickel Plated			
Material	Aluminum			

USB Absorptive Coaxial Single Pole Three Throw Switch 6 – 12GHz



Absolute Maximum Ratings

RF Input Power	+30dBm
----------------	--------

Ordering Information

Part No.	ECCN	Description
RFSP3TA0612GUSB	EAR99	SP3T 6-12GHz PIN Diode Switch

Environmental Specifications and Test Standards

Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-20°C~+75°C (Case Temperature)
Storage Temperature		-40°C~+85°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 Hours
Shock		1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude	MIL-STD-883	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)		MIL-STD-883 (For Hermetically Sealed Units)



Figure 1 (USB Control Panel)





RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFSP3TA0612GUSB



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.

USB Absorptive Coaxial Single Pole Three Throw Switch 6 – 12GHz