



RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFSP3TA0218BUSB

USB Absorptive Coaxial SP3T Switch 2 – 18GHz



Please refer to the outline drawing



Features

- Wide Band Operation 2-18GHz
- 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, $T_A = +25^\circ\text{C}$, USB Powered

Description	PN: RFSP3TA0218BUSB			
	SP3T Absorptive Switch			
	Low Power Cold Switching			
Parameters	Min	Typ.	Max	Units
Frequency Range	2-18			GHz
Insertion Loss			3.6	dB
Insertion Loss Temperature Coefficient		0.003		dB/ $^\circ\text{C}$
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 2 – 18GHz



Absolute Maximum Ratings

RF Input Power	+30dBm
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Ordering Information

Part No.	ECCN	Description
RFSP3TA0218BUSB	EAR99	SP3T 2-18GHz 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)





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