



SPDT Absorptive Electro-Mechanical Switch DC-50GHz



Features

- SPDT configuration
- Magnetic latching
- Operating life of 1 million cycles
- Guaranteed repeatability of 0.05dB up to 1 million cycles
- Excellent isolation, typically >80 dB to 20GHz
- Terminated ports
- TTL/5V CMOS compatible (optional)

Description

RF-Lambda multiport switch improves insertion loss repeatability and isolation, which is necessary for higher performance test systems. The repeatability and reliability of this switch is vital to ATS measurement accuracy and can cut the cost of ownership by reducing calibration cycles and increasing test system up time. The RF-Lambda terminated multiport switch provides the long life and reliability required for automated test and measurement, signal monitoring, and routing applications. Highly repeatable switching capability is made possible through RF-Lambda's rigorous design and tight manufacturing specifications. Low insertion loss repeatability reduces sources of random errors in the measurement path, which improves measurement accuracy.

Part Number	description	Type	Low Freq (GHz)	High Freq (GHz)	Max Power Input(Watts)
RFSPDT50EMB-T RFSPDT50EMB-T	Absorptive Electromechanical Switches	SPDT	DC	50	1
Insert. Loss (dB)	VSWR (Max:1)	Isolation (dB)	Actuator Type	Switching Speed (ms)	Contact
0.4(10MHz ~ 10GHz) 0.8 (10GHz ~ 20GHz) 1.2(20GHz ~ 50GHz)	1.25(10MHz ~ 10GHz) 1.5 (10GHz ~ 20GHz) 1.8(20GHz ~ 50GHz)	85(10MHz ~ 10GHz) 77(10GHz ~ 20GHz) 70(20GHz ~ 50GHz)	Latching Holding reflection	20	Break Before Make
Repeatability (dB) max.	Life Cycles (Tims)	Connector	Biasing (VDC)	Current (A)	Control
0.05	1,000,000	2.4mm	+24V (20-28V)	0.2	-T for TTL type -S for Ground type

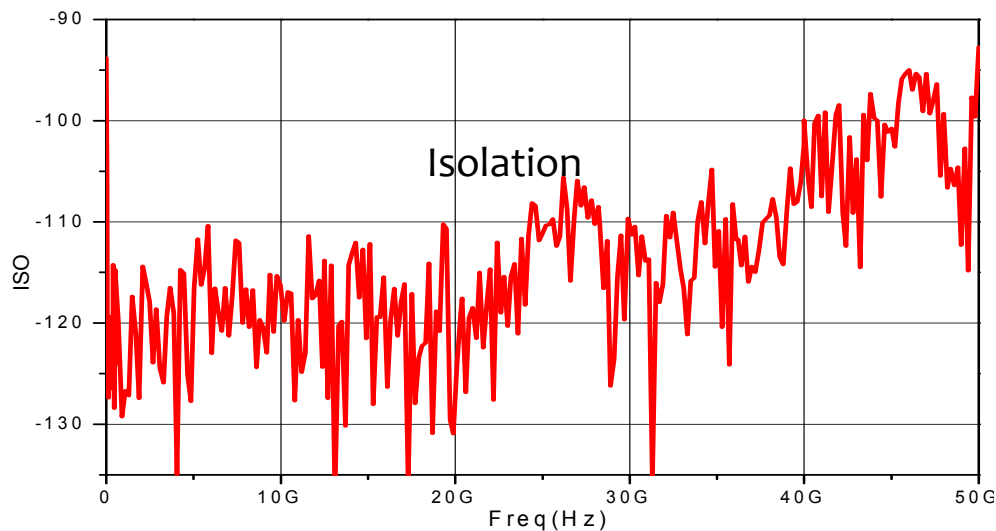
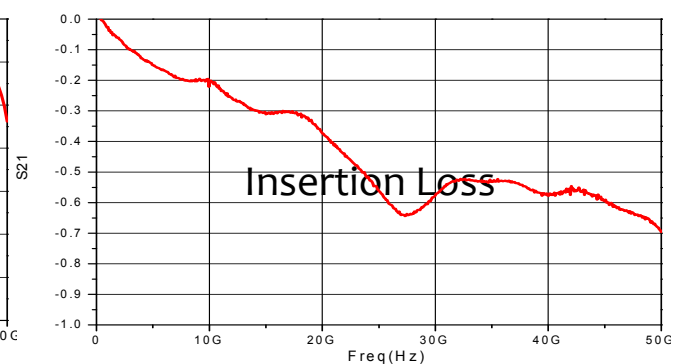
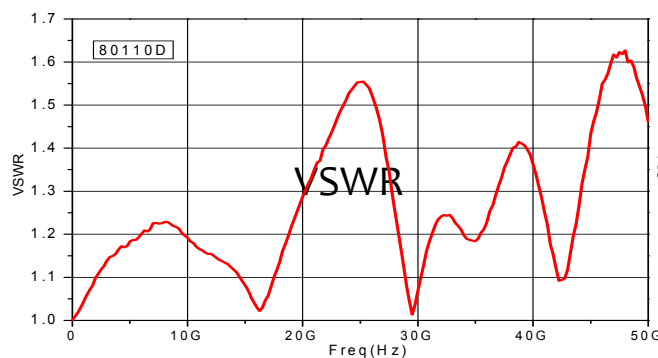
* Result taken at 25°C +15VDC



Environmental Specification

Operating temperature:	-25 to 75° C
Storage temperature:	-55 to 85° C
Thermal Shocking:	-25 to 70° C (1.5 hours holding, 10 times.)
Sine Vibration:	25 grams rms
Life Cycles:	1,000,000 times
Vibration:	20 grams rms.
Moisture resistance:	65° C, 95% RH, 10 days per MIL-STD-202F, Method 106E
Altitude storage:	30,000 feet (per MIL-STD-202F, Method 105C, Condition B)
RFI:	Per MIL-STD-461C, RE02, Part 4
Magnetic field:	<5 gauss 1/4 inch from surface
Hot switching:	2W CW 100W peak, 10us max pulse width

Typical test curve



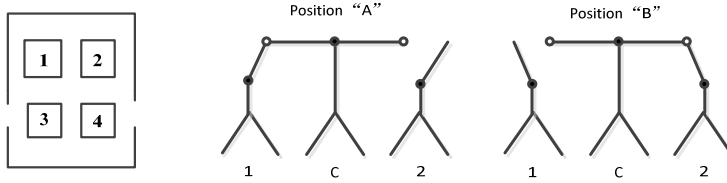


RF-LAMBDA

The power beyond expectations

RFSPDT50EMB

+5V TTL Control Type -- (Standard)

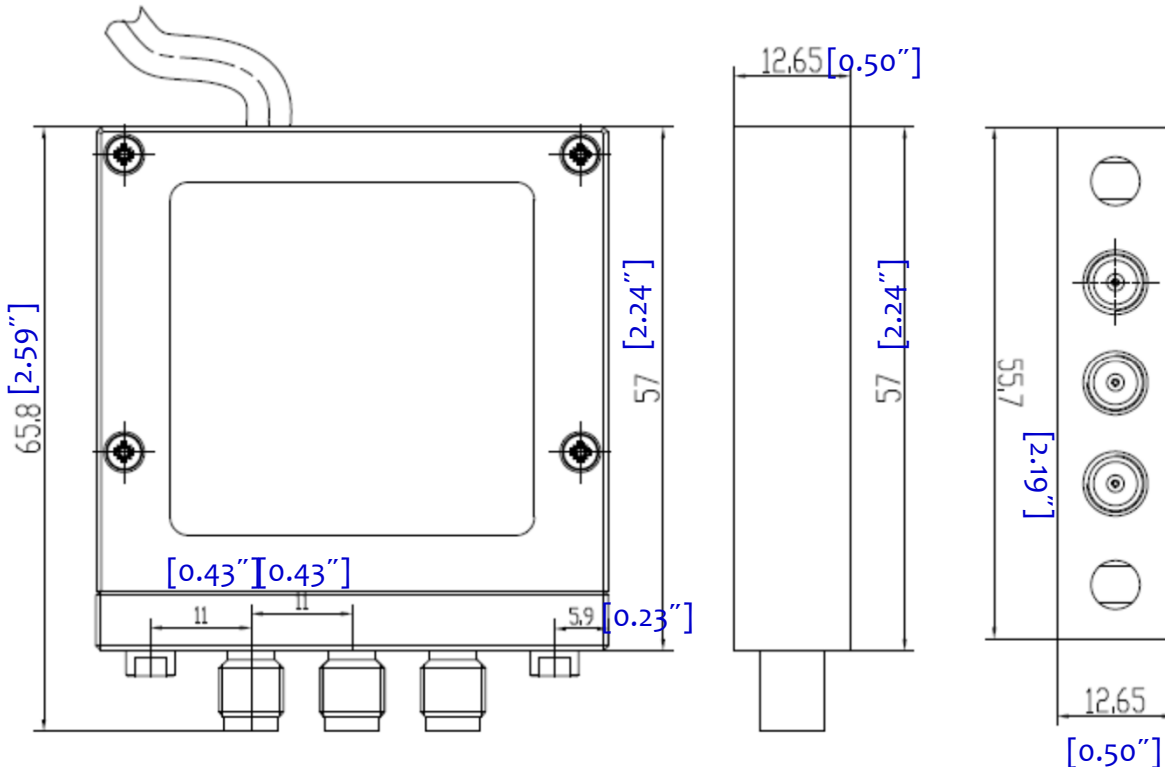


TTL Control Type -- (Standard)

		TTL (3.3~5.5V)		Path
PIN1	PIN2	PIN3	PIN4	
GND	+24V/+12V/+5V	TTL	OPEN	PositionA (C↔ 1)
GND	+24V/+12V/+5V	OPEN	TTL	PositionB (C↔ 2)
GND	+24V/+12V/+5V	OPEN	OPEN	Keep the original path
GND	+24V/+12V/+5V	TTL	TTL	Forbidden

Standard Control Type -- (Ground)

				Path
PIN1	PIN2	PIN3	PIN4	
GND	+24V/+12V/+5V	GND	OPEN	PositionA (C↔ 1)
GND	+24V/+12V/+5V	OPEN	GND	PositionB (C↔ 2)
GND	+24V/+12V/+5V	OPEN	OPEN	Keep the original path
GND	+24V/+12V/+5V	GND	GND	Forbidden



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