

**RF-LAMBDA**

LEADER OF RF BROADBAND SOLUTIONS

**RFSPDT26EME-S**

## SPDT Absorptive Electro-Mechanical Switch DC – 26.5GHz

### 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's multiport switch offers low insertion loss and high isolation, which is necessary for high 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.

Our electro-mechanical switches are made through RF-Lambda's rigorous design and tight manufacturing specifications.

| Part Number                           | Description                           | Typ            | Low Freq (GHz) | High Freq (GHz)          | Max Power Input(Watts) |
|---------------------------------------|---------------------------------------|----------------|----------------|--------------------------|------------------------|
| RFSPDT26EME-S                         | Absorptive                            | SPDT           | DC             | 26.5                     | 1                      |
| Insert. Loss (dB)                     | VSWR (Max)                            | Isolation (dB) | Actuator Type  | Switching Speed (ms Max) | Contact                |
| 0.3(DC~12.4 GHz)<br>0.6(12.4~26.5GHz) | 1.3(DC~12.4 GHz)<br>1.5(12.4~26.5GHz) | 60(DC~26.5GHz) | Latching       | 20                       | Break Before Make      |
| Repeatability (dB) max.               | Life Cycle                            | Connector      | Biasing (VDC)  | Current (A)              | Control                |
| 0.05                                  | 1 million                             | 3.5mm          | 12V            | 0.40                     | -S for Ground type     |

\* Result taken at 25°C

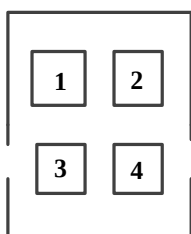
SPDT Absorptive Electro-Mechanical Switch DC – 26.5GHz



**Environmental Specifications and Test Standards**

| Parameter                        | Standard      | Description                                                                                                                                                                                                     |
|----------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operational Temperature          | MIL-STD-39016 | -45°C~+85°C (Case Temperature)                                                                                                                                                                                  |
| Storage Temperature              |               | -50°C~+125°C                                                                                                                                                                                                    |
| Thermal Shock                    |               | 1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)                                                                                                                                                                       |
| Random Vibration                 |               | Acceleration Spectral Density 6 (m/s)<br>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<br>2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s<br>3. Total 18 times (6 directions, 3 repetitions per direction). |
| Altitude                         |               | Standard: 30,000 Ft (Epoxy Sealed Controlled Environment)<br>Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)                                                                                             |
| Hermetically Sealed (Optional)   | MIL-STD-883   | MIL-STD-883 (For Hermetically Sealed Units)                                                                                                                                                                     |

**Control Connector**



**Control Table**

| State   | Standard drive |      |      |      |
|---------|----------------|------|------|------|
|         | PIN1           | PIN2 | PIN3 | PIN4 |
| RF to 1 | GND            | +12V | GND  | Open |
| RF to 2 | GND            | +12V | Open | GND  |



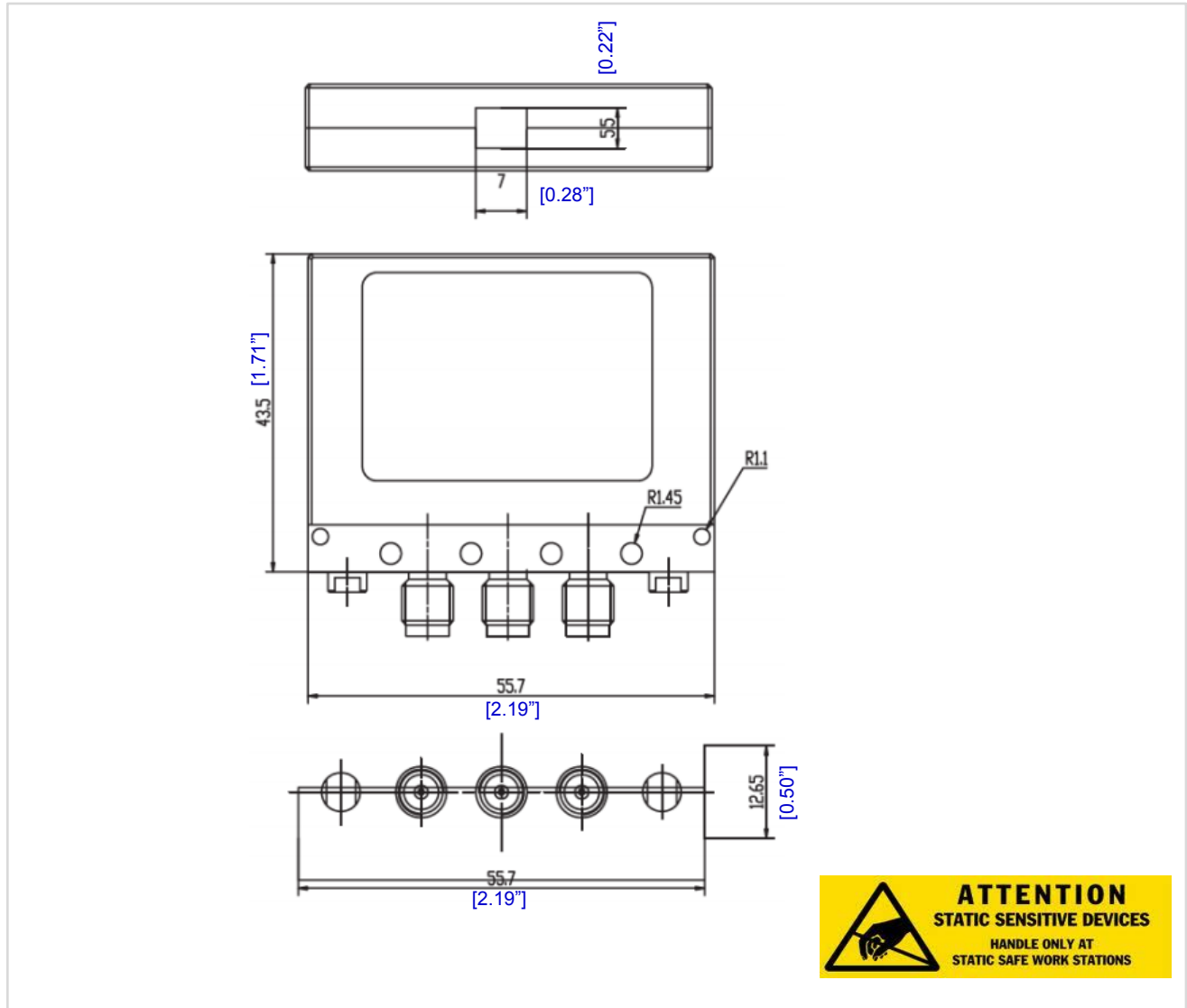
# RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

## RFSPDT26EME-S

### Outline Drawing:

All Dimensions in mm [inches]



### 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.

SPDT Absorptive Electro-Mechanical Switch DC – 26.5GHz