



# RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

## RFSP2TA0005GUSB

### USB Absorptive Coaxial SP2T Switch 0.001 - 4.5GHz



#### Features

- Wide Band Operation 0.001-4.5GHz
- USB Controlled and Powered.
- Low Insertion Loss and High Isolation
- Customization available upon request
- Control SW included.

#### Typical Applications

- Automated Test
- Aerospace and military applications

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

| Description                            | PN: RFSP2TA0005GUSB              |       |     |        |
|----------------------------------------|----------------------------------|-------|-----|--------|
|                                        | SP2T Absorptive Switch           |       |     |        |
|                                        | Low Power Cold Switching         |       |     |        |
| Parameters                             | Min                              | Typ.  | Max | Units  |
| Frequency Range                        | 0.001-4.5                        |       |     | GHz    |
| Insertion Loss                         |                                  |       | 2.5 | dB     |
| Insertion Loss Temperature Coefficient |                                  | 0.003 |     | dB/°C  |
| Isolation                              | 70                               |       |     | dB     |
| Input VSWR                             |                                  |       |     | : 1    |
| Output VSWR                            |                                  |       |     | : 1    |
| RF Input Power (CW)                    |                                  |       | 1   | W      |
| DC Power Dissipation                   |                                  |       |     | W      |
| 0.1dB Compression Point (Po.1dB)       |                                  |       |     | dBm    |
| IIP3                                   |                                  |       |     | dBm    |
| Weight                                 |                                  |       |     | ounces |
| Impedance                              | 50                               |       |     | Ω      |
| Bias Current                           |                                  |       |     | mA     |
| Control Interface                      | USB 2.0 (Control Cable Included) |       |     |        |
| Switching Speed                        | 250ns                            |       |     |        |
| Input / Output Connectors              | SMA-Female                       |       |     |        |
| Finish                                 | Gold Plated or Nickel Plated     |       |     |        |
| Material                               | Aluminum                         |       |     |        |

USB Absorptive Coaxial Single Pole Double Throw Switch 0.001 - 4.5GHz



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### Absolute Maximum Ratings

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

### Ordering Information

| Part No.        | ECCN  | Description                           |
|-----------------|-------|---------------------------------------|
| RFSP2TA0005GUSB | EAR99 | SP2T 0.001-4.5GHz<br>PIN Diode Switch |

### Environmental Specifications

|                              |                                                          |
|------------------------------|----------------------------------------------------------|
| Operational Temperature (°C) | -20 ~ +75                                                |
| Storage Temperature (°C)     | -40 ~ +85                                                |
| Vibration                    | 25g RMS (15 degrees 2KHz)<br>endurance, 1 hour per axis  |
| Shock                        | 20G for 11msec half sine wave,<br>3 axis both directions |



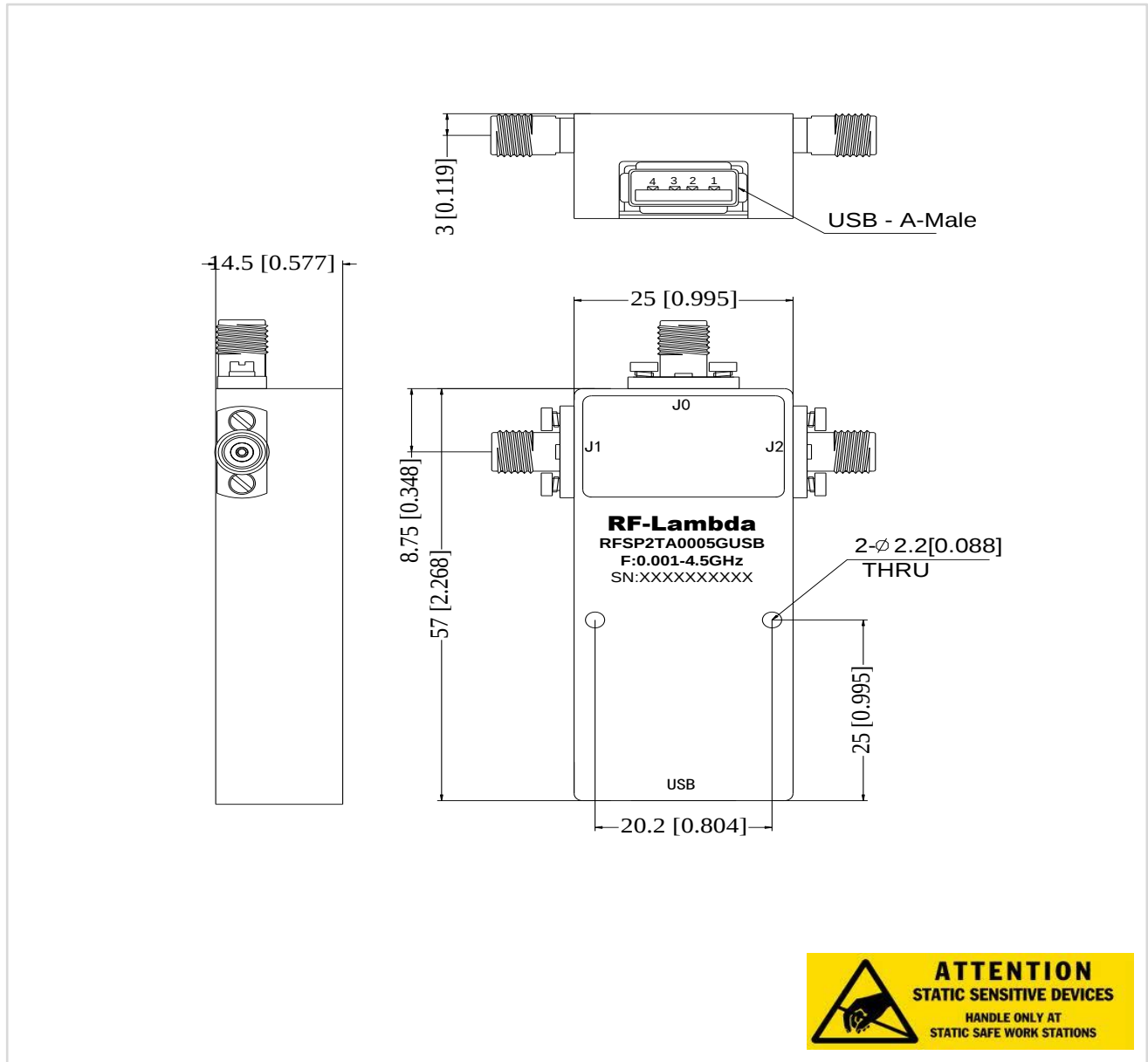
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### Outline Drawing:

All Dimensions in mm [inches]



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Figure 1 (USB Control Panel)

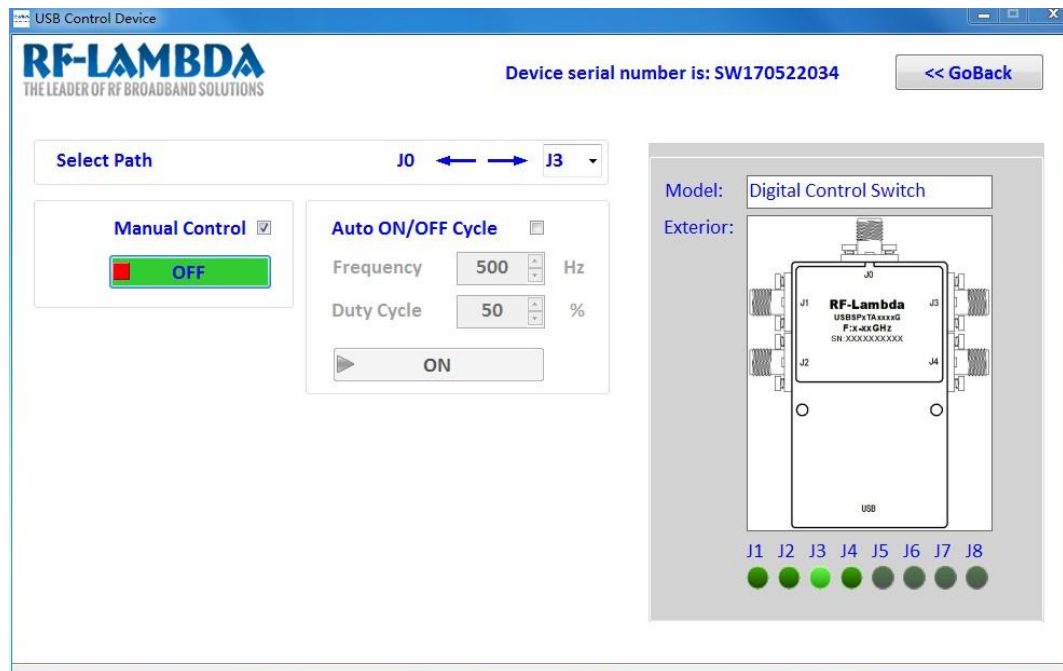




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