Lab Brick®
LSW Series Switch

- *SPDT and SP4T models available*
- *10 Watt power handling capability*
- *USB powered and controlled*
- *Includes easy to install and use GUI*
- *Manual, Internal and External switch control capability*
- *Operate multiple devices directly from a PC or self powered USB hub*
- *Easily programmable for ATE applications*
- *Robust aluminum construction*

The Lab Brick Switch product family offers reliable, high isolation and low cost solid state switch products in both single pole double throw and single pole four throw configurations. These units require connection to a USB port for control and power. No additional DC supply voltage is required. Lab Brick Switches are easily controlled and programed directly from the included GUI or through the external control inputs. Lab Brick Switch API dll and LabVIEW compatible drivers are also available for custom programming applications.

Applications include:

- Automated Test Equipment (ATE)
- WiMAX, 3G, LTE test platforms
- Engineering/Production Test Labs

Electrical LSW Series

Operating Frequency, 50 Ohm	0.01 to 6 GHz
LSW-602PDT	Single pole, 2 throw, terminated
LSW-602P4T	Single pole, 4 throw, terminated
Operating Frequency, 75 Ohm	0.01 to 1 GHz
LSW-102PDT-75F	Single pole, 2 throw, terminated
LSW-102P4T-75F	Single pole, 4 throw, terminated
Insertion Loss	0.01 to 2 GHz: 1.5 dB typ. 2.5 dB max.
	2 to 3 GHz: 2.5 dB typ. 3.5 dB max.
	3 to 4 GHz: 3.5 dB typ. 4.5 dB max.
	4 to 5 GHz: 4.0 dB typ. 5.5 dB max.
	5 to 6 GHz: 4.5 dB typ. 6.0 dB max.
Isolation SPDT	65 dB typ. 55 dB min.
Isolation SP4T	60 dB typ. 50 dB min.
Return Loss (all ports)	20 dB typ. 10 dB min
Input Power (for 0.1 dB Compression)	0.01 to 3 GHz: 42 dBm typ.
	3 to 4 GHz: 41 dBm typ.
	4 to 6 GHz: 40 dBm typ.
Input 3rd Order Intercept	+60 dBm typ.
Max Input Power[3] (all ports terminated)	+40 dBm
Switching Speed	300 nS max.
Control (Internal)	GUI, API
Control (External)	TTL signal
Control Logic SPDT	VctlA =1 RFC to RF1
	VctlA =0 RFC to RF2
Control Logic SP4T	VctlA =1, VctlB=1 RFC to RF1
	VctlA =1, VctlB=0 RFC to RF2
	VctlA =0, VctlB=1 RFC to RF3
	VctlA =0, VctlB=0 RFC to RF4
DC Power	5V/40 mA via USB
GUI Compatibility	Windows™ 7, 8, XP, 2000

Mechanical

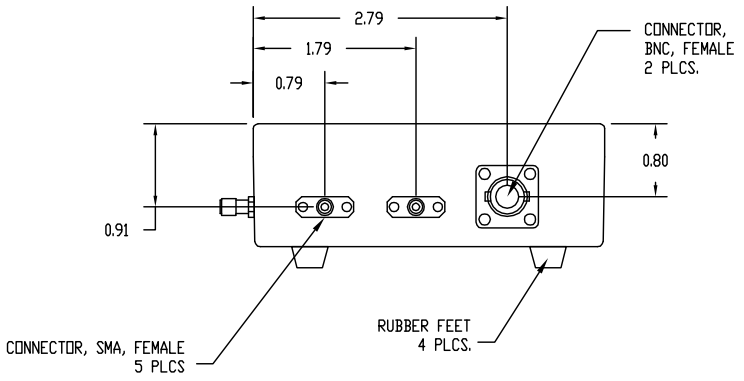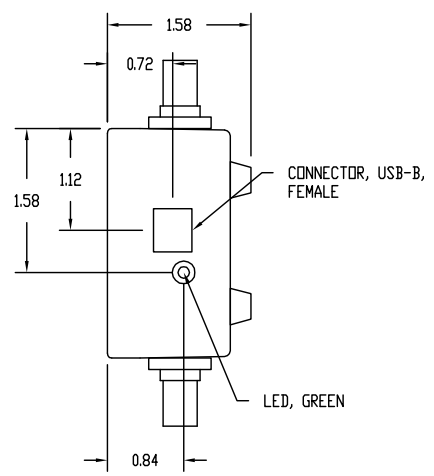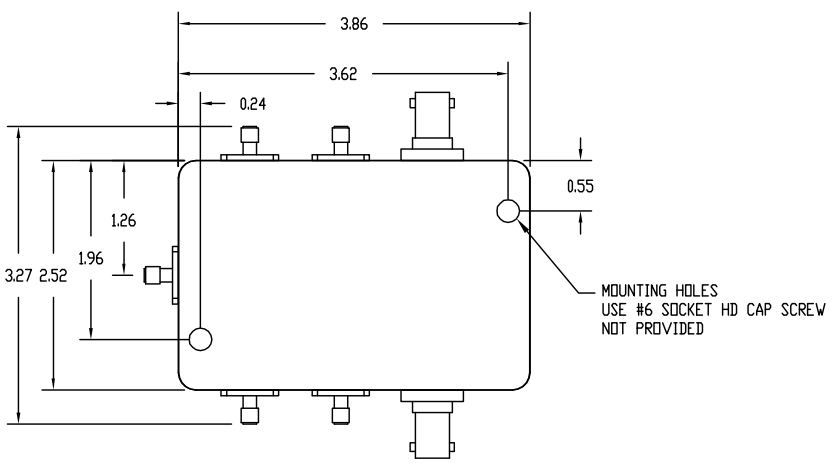|	
Dimensions	3.86" x 2.52" x 1.35" (98 mm x 64 mm x 34 mm)
Weight	< 0.5 lbs (0.23 Kg)
RF Connectors 50 Ohm	SMA-F
RF Connectors 75 Ohm	Type F-F
External Control Connectors	BNC-F
USB Cable	USB 2.0 A/B

Notes

1. These specifications are subject to change without notice.

2. Customized models are available tailored to specific performance requirements.

3. All RF ports must be properly terminated for operation above +30 dBm or damage may occur.

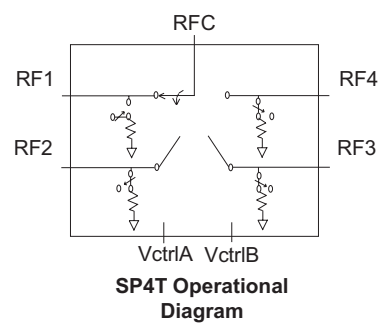4. The GUI software and 6' USB cable are included with the purchase of each Lab Brick Switch.
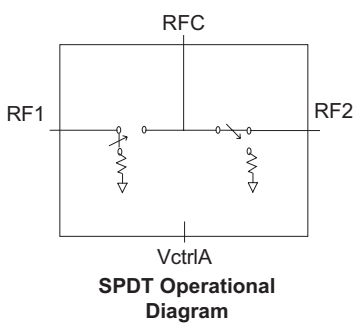
Mechanical dimension drawings:

- 3.86
- 3.62
- 0.24
- 0.55
- 1.26
- 1.96
- 3.27 2.52

MOUNTING HOLES
USE #6 SOCKET HD CAP SCREW
NOT PROVIDED

- 1.58
- 0.72
- 1.12
- 1.58
- 0.84

CONNECTOR, USB-B, FEMALE

LED, GREEN

NOTE:

1. DIMENSIONS ARE NOMINAL

- 2.79
- 1.79
- 0.79
- 0.80
- 0.91

CONNECTOR, BNC, FEMALE 2 PLCS.

CONNECTOR, SMA, FEMALE 5 PLCS

RUBBER FEET 4 PLCS.

SPDT Operational Diagram

RFC, RF1, RF2, VctrlA

SP4T Operational Diagram

RFC, RF1, RF4, RF2, RF3, VctrlA, VctrlB

See performance graphs online at www.vaunix.com

RoHS COMPLIANT