

Introduction:



Fig1: USB3.0 Type B receptacle Test Fixture(USB3-BR01A)

LiTek's USB3.0 Type B receptacle Test fixture (USB3-BR01A) can be used to measure the Device with USB3.0 Protocol Signal Generator or Real-Time Scope after connect USB3.0 Type A to Type B cable assembly. It can also be used to measure USB3.0 Type B plug connectors with suitable test settings.



Fig2: USB3-BR01A plugged into Host Device after Type A to Type B cable assembly

For Host Device testing, we can use a determined USB3.0 cable assembly, then connecting to USB3-BR01A. SSRX in the test fixture can be connected to real-time scope. SSTX in the test fixture can be connected to Signal generator or protocol generator.



Fig3: USB3-BR01A plugged with Type B Plug DUT.

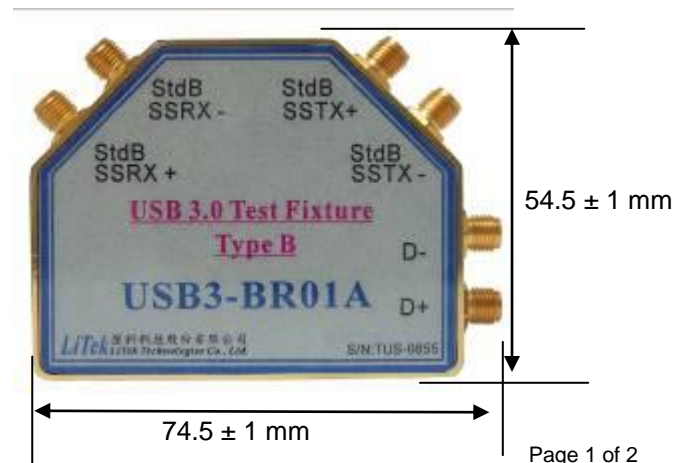
For USB3.0 Type B plug connector testing. We can soldered DUT on the reference board or terminated in the far end and connected with USB3-BR01A for Impedance and NEXT testing. LiTek Also apply the reference board for standard Type B Plug in option.

In some case, we may change the Type B Receptacle for user purpose. Customers can apply their considered type B receptacle to do the USB3-BRXXX as the other test fixtures.

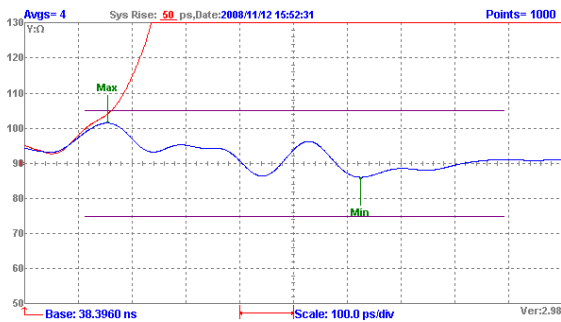
Features:

1. Good Impedance match: $100\Omega \pm 5\Omega$
2. Short Trace Length: meet USB3.0 spec.
3. Fast Rise Time: Less than 50 ps.
4. Low Intra pair skew: $\pm 2ps$
5. Low Loss design: Less than 3 dB @5GHz
6. Signal Pairs: SSRX/ SSTX and USB D+/D-.
7. 6 SMA connectors and Type B receptacle.

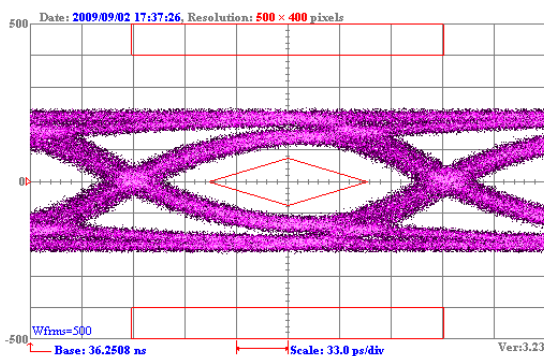
Fig4: USB3-BR01A dimensions



USB3.0 Mated impedance



USB3.0 Eye diagram with 2M Cable



Application and Reference:

USB3-BR01A can be used to these listed below:

- USB3.0 Devices.
- USB3.0 HUB with Type B receptacle connectors.
- Others with Type B plug connectors.
- Measurements for USB3.0 Type B plugs.
- Measurements for USB3.0 Cable with Type B plug side connector.

USB3.0 Measurement Related websites:

- USB Org: <http://www.usb.org>
- Agilent: <http://www.agilent.com>
- Tektronix: <http://www.tektronix.com>
- LiTeK: <http://www.litek.tw.com>

Related LiTek Products:

Customer own USB3-BR01A may also buy:

- USB3-AP01A: USB3.0 Type A plug test fixture.
- USB3-AR01A: USB3.0 Type A receptacle test fixture.
- USB3-BP01A: USB3.0 Type B Plug test fixture.
- USB3-MP01A: USB3.0 Type Micro A/B plug test fixture.
- USB3-MR01A: USB3.0 Type Micro A/B receptacle test fixture.
- USB3-CK01A: USB3.0 2X trace Calibration Kit.
- TpNA for USB3.0 Software.

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