# **Introduction:**



Fig 1: QSFP Receptacle Test Fixture(QSFP-B07BR)

QSFP is a compact, hot-pluggable transceiver used for data communications applications. It interfaces a network device motherboard to a fiber optic cable. It is an industry format jointly developed and supported by many network component vendors, allowing data rates from 4x25 Gbit/s.

LiTek QSFP test fixture is used to test the QSFP cable assembly. When the assembly is with other type of connector in the other end, the testing have to be achieved using other test fixtures, like SFP test fixture.

## **Features:**

- 1.Good Impedance match:  $100\Omega \pm 3\Omega$
- 2.Fast Rise Time: Less than 50 ps.
- 3.Low Intra pair skew: ± 2ps
- 4.Singal Pairs:RX0,RX1,RX2,RX3,TX0,TX1,TX2,TX3
- 5.18 SMA connectors and QSFP receptacle connector

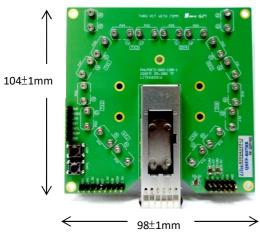


Fig 2: QSFP-R07BR Dimensions

# **Tested Parameters:**

- 1. Differential Mode Return Loss.
- 2. Differential Insertion Loss.
- 3. More other S-Parameters
- 4. Differential Mode Impedance.
- 5. Common Mode Impedance.
- 6. Mated Connector Impedance.
- 7. Differential Mode Delay.
- 8. Inter Pair Skew.
- 9. Intra Pair Skew.
- 10.EYE Diagram.

# **Tested report:**

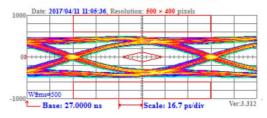
#### Mated Impedance

## QSFP Differential Mode Impedance Graphic result



### QSFP Eye diagram with 1M Cable

### QSFP Eye Diagram Graphic result



# Reference

QSFP Measurement Related websites:

- →Keysight:http://www.keysight.com
- →LiTek:http://www.litektw.com

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