



HARWIN

Test Report Summary

HT02902

Vibration Testing of PC/104 and
PC/104 Plus Connectors

1. Introduction

1.1. Description and Purpose

The purpose of this test program is to confirm the vibration, shock and bump performance of Harwin PC/104 and PC/104 Plus connectors. Standard EIA-364-28 was used for this vibration requirement.

1.2. Conclusion

The following test data has been taken from Harwin test report 619. All tested connectors passed the vibration performance test and met the EIA-364-28 test requirements. No visible deficiencies in any of the connectors were apparent after or during testing. Circuit discontinuity of the connectors was at less than one microsecond opening time during vibration.

2. Test Method, Requirements and Results

2.1. Specification Parameters

The testing performed included Vibration testing to EIA-364-28, to mated connectors.

2.2. List of Test Samples

- M20-610XX05 – PC/104 Stackthrough Connector, solder tails
- M20-616XX05 – PC/104 Non-Stackthrough Connector, press-fit tails
- M22-6003005 – PC/104 Plus Stackthrough Connector, solder tails
- M22-6013005 – PC/104 Plus Non-Stackthrough Connector, solder tails
- M22-6023042 – PC/104 Plus Post Header Connector
- M22-6033042 – PC/104 Plus Post Receptacle Connector
- M22-6053005 – PC/104 Plus Stackthrough Connector, press-fit tails
- M22-6063005 – PC/104 Plus Non-Stackthrough Connector, press-fit tails

2.3. Test Method and Results

Methodology: The sample was mounted to a high frequency electro dynamic vibration bed subjected to a Swept Sine Test:

- 10Hz-55Hz-10Hz at 1.5mm amplitude once every minute
- 120 minutes in each axis, 3 mutually perpendicular directions, 6 hours in total

Results: When measuring for appearance deficiencies, no evidence of physical damage was apparent on any of the connectors. When detecting for open circuits, discontinuity of the circuit was measured at less than one microsecond opening time in all cases.