



**HARWIN**

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**Harwin Test Report Summary**

**HT04501**

**Dielectric Breakdown Testing  
For Datamate (M80 Series)  
Trio-Tek Connectors**

Datamate **Trio-Tek**

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## Test Report for Datamate Trio-Tek – Dielectric Breakdown Testing

### 1. Introduction.

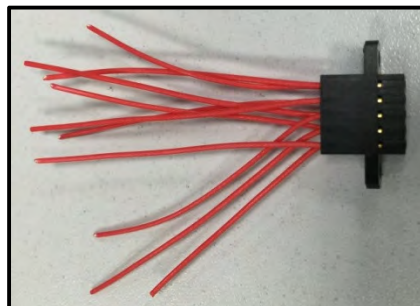
#### 1.1. Description and Purpose

The Harwin Datamate Trio-Tek connector has been designed to withstand 1200V without compromising on mechanical or electrical performance. The following tests were carried out to confirm the connector's electrical performance characteristics. A voltage was applied to two adjacent pins of the two millimetre connector and incrementally increased to establish the ultimate breakdown voltage.

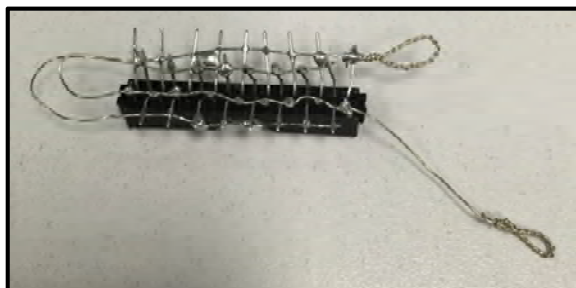
#### 1.2. Conclusion.

The following information has been taken from Harwin test report 1272. The test results in test report 1272 showed that the connector can withstand 2100V for 1 minute before breakdown. Therefore, Harwin has specified a 1200V Voltage Proof rating and 800V Working Voltage to this connector.

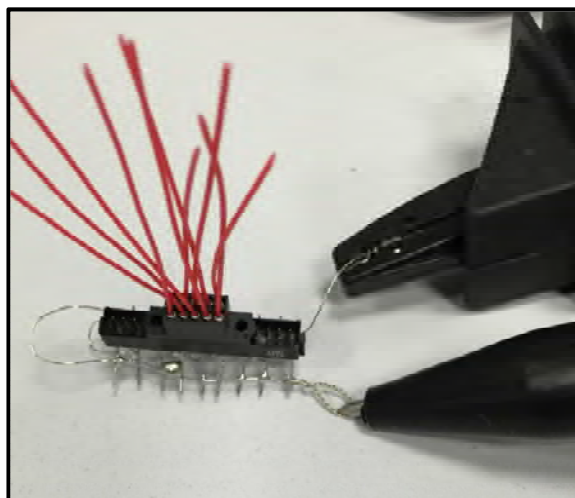
### 2. Test Method, Requirements and Results.



Trio-Tek product to be tested.



L-Tek Test Piece to be used.



Test Setup.

## Test Report for Datamate Trio-Tek – Dielectric Breakdown Testing

### Tested Parts:

|                           |             |
|---------------------------|-------------|
| <b>Housing (Moulding)</b> | M80-454XX98 |
| <b>Contacts</b>           | M80-2830045 |

### Results Table:

| Voltage (DC) | 08 Way | 10 Way | 20 Way |
|--------------|--------|--------|--------|
| 500          | Pass   | Pass   | Pass   |
| 600          | Pass   | Pass   | Pass   |
| 700          | Pass   | Pass   | Pass   |
| 800          | Pass   | Pass   | Pass   |
| 900          | Pass   | Pass   | Pass   |
| 1000         | Pass   | Pass   | Pass   |
| 1100         | Pass   | Pass   | Pass   |
| 1200         | Pass   | Pass   | Pass   |
| 1300         | Pass   | Pass   | Pass   |
| 1400         | Pass   | Pass   | Pass   |
| 1500         | Pass   | Pass   | Pass   |
| 1600         | Pass   | Pass   | Pass   |
| 1700         | Pass   | Pass   | Pass   |
| 1800         | Pass   | Pass   | Pass   |
| 1900         | Pass   | Pass   | Pass   |
| 2000         | Pass   | Pass   | Pass   |
| 2100         | Pass   | Pass   | Pass   |
| 2200         | Fail   | Fail   | Fail   |
| 2300         | Fail   | Fail   | Fail   |
| 2400         | Fail   | Fail   | Fail   |

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