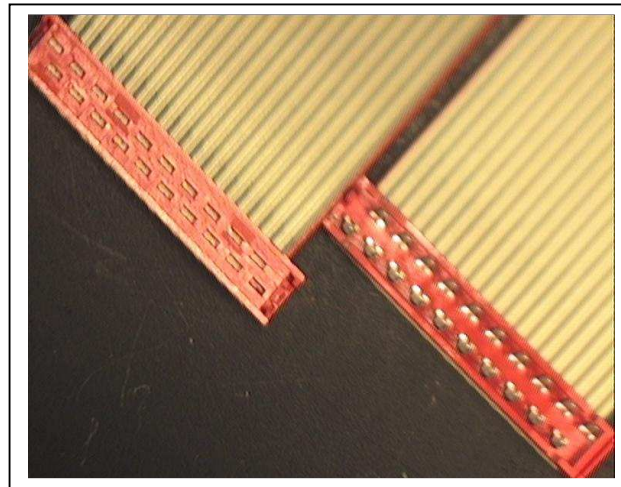


ENVIRONMENTAL TESTING LABORATORY

Job Number: E04.07.01	Project Number: 770002	Date of issue: May 2005
Description: Micro Match Resistance to leadfree wave soldering heat		Part numbers: 9-215570 Rev. N (Paddle board)

Scope:
To verify resistance to soldering heat



Conclusions:
After 10 seconds exposure to a soldering temperature of 265 °C in the assembled condition, no negative effects were found on visual aspect or on termination resistance of the IDC connection.

Note: this report is valid for all Micro Match paddleboard products.

Test Specification:	Product Specification 108-19052 Rev. E. Tyco Test-Spec. 109-202, Rev. B	
Test Carried Out:	1 Expose to soldering heat 2 Visual inspection 3 Measure termination resistance of the IDC connection	
Distribution:	1 R. Verbeet 2 Doc. center 3 File Lab.	
Test Engineer: H. van Oosterhout	Requested by: R. Verbeet	
Laboratory Manager: D.M.J. Jooren.	Classification: Unrestricted	
Disposal of Samples: Destroyed	Report Number: 501-19094	Rev. O
Appendices:	Page 1 of 2 Pages	

SAMPLE DESCRIPTION

10 Cable assemblies

TEST PROCEDURES and TEST SEQUENCE

IEC 60512-1-1:

Test 1a

Visual examination:

The test samples were visually inspected under a stereomicroscope, at a 10x magnification, with suitable illumination.

IEC 60512-2-1:

Test 2a

Termination resistance:

The termination resistance was measured with an open circuit voltage of 20 mVolt and a maximum current of 100 mA DC, between the solder tab and the end of the cable conductor. This includes the bulk resistance of the solder contact and approx. 75mm of wire.

Tyco 109-202,
§4 Method B

Resistance to soldering heat:

Solder tails of the connector were mechanically dipped in molten solder at a temperature of 265°C during 10 seconds. As a thermal shield, a printed circuit board was applied.

Termination resistance:

See above

IEC 60512-11-4:

Test 11e

Rapid change of temperature:

The samples were subjected to a rapid change of temperature test with the following parameters:

One cycle consists of:

Upper temperature : 105°C for 15 minutes.

Lower temperature : -40°C for 15 minutes.

Condition : mated.

Number of cycles : 10

Termination resistance:

See above

EQUIPMENT USED

<u>Equipment</u>	<u>Producer</u>	<u>Type</u>	<u>Series Nb</u>	<u>Cal. Due</u>
Micro-ohmmeter	Keithley	580	374687	12-05.
Climatic chamber	Weiss	80-200DU-ST	224/17413	01-06

SUMMARY OF TESTRESULTS

Visual inspection: No detrimental effects were found

Termination resistance: No termination resistances greater than 10 mΩ were found after exposure to soldering heat and subsequent rapid change of temperature.