NICOMATIC

NICOMATIC Test report summary

CMM Family

SOLDERABILITY Test

CREATIVE
INTERCONNECT
SOLUTIONS

I. Introduction

A. Purpose

The CMM connectors' family are manufactured to meet or exceed the requirements of **MIL-DTL-55302G standard**.

B. Scope

to determine the solderability of all terminations which are normally joined by a soldering operation. This determination is made on the basis of the ability of these terminations

to be wetted by solder and the predictability of a suitable fillet resulting from solder application. These procedures will verify that the pre-assembly lead finish provides a solderable surface of sufficient quality to enable satisfactory soldering.

The following data has been taken from NICOMATIC Qualification test reports **QTR0944**.

C. Conclusion

The CMM connectors' family are **qualified** regarding **SOLDERABILITY** according to **MIL-DTL-55302G**.

No physical damage to the termination or connectors resulting from soldering.

II. Test Method and Requirements

A. List of Test Samples

a. CMM 200 Series

- 201Y50L – LF male contacts Straight PCB _ 13507
- 202Y50 – LF female contacts Straight PCB _ C14764

b. CMM 220 Series

- 221V50FXX – LF male contacts 90° PCB _ 13507
- 222S50MXX – LF female crimp contacts _ C12468
- 222YL26MXX – LF male contacts Straight PCB _ C14810
- 221S26FXX – LF male crimp contacts _ 12969
- 221D00FXX-0008-3400CMM – HP30 male contacts 90° PCB _ 30-3400-CMM
- 222E00MXX-0008-4320 – HP30 female straight contacts on cable _ 30-4320
- 222Y08SXX-0004-4300CMM – HP30 + LF female contacts Straight PCB _ 30-4300-CMM + C14764
- 221S08FXX-0004-3308 – HP30 + LF male contacts Straight on cable _ 30-3308 + 12969

- 221S06FXX-0003-3320 – HP30 + LF male contacts Straight on cable _ 30-3320 + 12969
- 222S06MXX-0003-4308 – HP30 + LF female contacts Straight on cable _ 30-4308 + C12468

c. *CMM 320 Series*

- 321C057FXX – LF male crimp contacts _ 12960
- 322C057MXX – LF female crimp contact _ C13064-P
- 321V096FXX – LF male contacts 90° PCB _ 13507
- 322Y096MXX – LF female contacts Straight PCB _ C14812
- 341D000FXX-0018-340014 – HP22 male contacts 90° PCB _ 22-3400-XX
- 342E000MXX-0018-4310 – HP22 female straight contacts on cable _ 22-4310
- 342D000MXX-0048-430014 – HP22 female contacts Straight PCB _ 22-4300-14
- 341E000FXX-0048-3310 – HP22 male straight contacts on cable _ 22-3310

B. Requirements

According to **MIL-DTL-55302G** standard and **MIL-STD-202** test procedure method 208

C. Test Method and Results

Flux shall be applied by a suitable method and allowed to drain for 5 to 20 seconds.

The solder shall be applied to the terminal along with the clean solder coated tip of an iron

Unless otherwise specified in the individual specification, iron temperature shall be 350°C ± 5.5°C

The termination shall be positioned so that the iron can be applied to the test surface in a horizontal position

Unless otherwise specified in the individual specification, the iron shall be applied for a period of 5 ±0.5 seconds and shall remain stationary during this period.

the connectors are subjected to soldering operation at 350°C, according to MIL-DTL-55302F standard.& MIL-STD-202 Method 208 test procedure.

No physical damage to the termination or connectors from soldering test qualification.