

X3T9.2/92-49

SCSI-3 CONNECTOR

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WORKING MEETING

- TO DISCUSS THE ADDITION OF ATTRIBUTE TO THE SCSI-3 DOCUMENT
- TO REACH AN AGREEMENT ON AN ADDITION
- THE CONNECTOR BEING DISCUSSED IS THE CONNECTOR ON RECORD IN THE SCSI-3 WORKING DOCUMENT

WHY ATTRIBUTES

- TO SPECIFY A * MINIMUM * REQUIREMENT FOR BOTH THE USER AND THE SUPPLIER
- PROMOTE QUALITY BEFORE COST
- MORE CONSISTENCY AMONGST SUPPLIERS

SCSI-3 P CONNECTOR ATTRIBUTES

• NOTE TO CONTROL SURFACE FINISH AND PLATING

ONE Combined Note

• NOTE TO SPECIFY A PERFORMANCE LEVEL

• DIMENSION A RADIUS ON THE BLADE

$.040 \pm 0.018$

• ~~REDIMENSION THE TIP OF THE BLADE~~

• Molex + Amp to Review
Stud Dimensions

SURFACE NOTE

- ALTERNATE 1 CONNECTOR SYSTEM TO BE MULTI WIPE DESIGN WHICH IS CAPABLE OF A MINIMUM OF 50 MATING CYCLES WITHOUT WEAR THRU OF THE NOBLE CONTACT SURFACE.

- ATTRIBUTES AFFECTED BY NOTE
 - SURFACE FINISH

 - PLATING

PERFORMANCE NOTE

- CONTACT GEOMETRY AND NORMAL FORCE TO BE SUFFICIENT TO MAINTAIN A MAXIMUM CHANGE OF RESISTANCE OF 100% FROM AN INITIAL RESISTANCE READING AFTER THE FOLLOWING SEQUENCE OF TESTS:
 - INITIAL CONTACT RESISTANCE MEASUREMENT
 - 50 MATING/UNMATING CYCLES
 - CONTACT RESISTANCE
 - PERFORM FLOWING MIXED TEST GAS PER IEEE 1156.1 ON MATED CONNECTORS
 - MEASURE CONTACT RESISTANCE AND COMPARE TO INITIAL MEASUREMENT
 - RESISTANCE TO BE MEASURED USING A 4 POINT METHOD DIRECTLY ACROSS CONNECTOR

- ATTRIBUTES AFFECTED
 - CONTACT SHAPE/DESIGN
 - NORMAL FORCE
 - PLATING POROSITY

Combined Note

Working Meeting 3/16/92

- With

- An Crest

ATTRIBUTES TO THE PIN PORTION

- PIN -- .016 X .024 ON .050 CENTERS
- MATING SURFACE TO HAVE A RADIUS OF 1,143
+/-0,127 ~~-.045~~ ~~+/-0.005~~

.040 +/- .010

— MAXIMUM TIP LENGTH OF ~~-.089~~ *.035*

ATTRIBUTES TO THE RECEPTACLE PORTION

- CHANGE NOTE TO READ --THE SOCKET CONTACTS TO BE CENTERED IN HOUSING

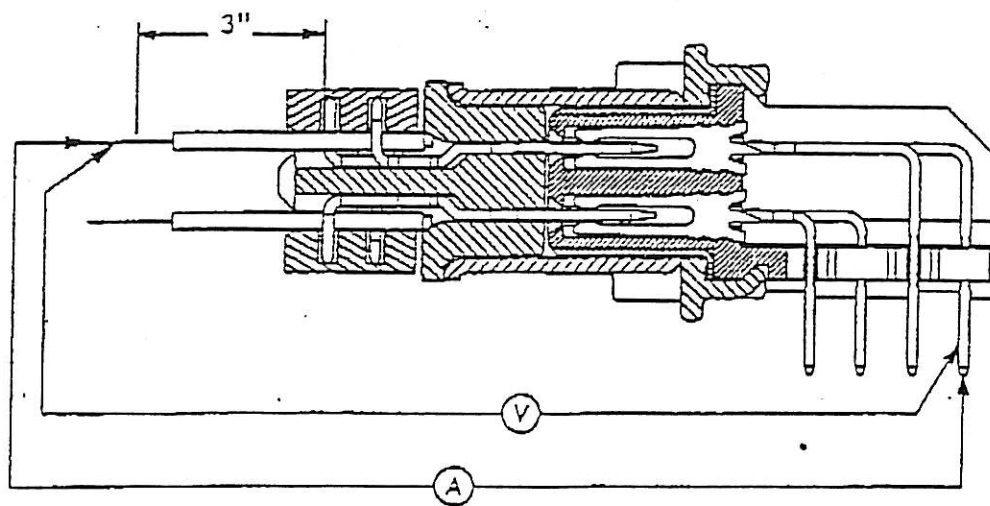
ASSUMPTIONS

- THAT THE WORKMANSHIP OF THE CONNECTOR SYSTEM ALLOWS ALL OF THE ATTRIBUTES TO FUNCTION AS A QUALITY DESIGN.
- THIS ASSUMES THAT ALL THE PARTS ARE PROPERLY POSITIONED AND THE CORRECT AMOUNT OF CLEARANCES ARE AVAILABLE

CONTACT RESISTANCE SHALL NOT CHANGE BY MORE THAN 100% THROUGH THE FOLLOWING SEQUENCE OF TESTS:

- ◆ INITIAL CONTACT RESISTANCE
- ◆ 50 CYCLE DURABILITY
- ◆ CONTACT RESISTANCE
- ◆ MIXED FLOWING GAS MATED PER ASTM SPEC XXX
- ◆ CONTACT RESISTANCE

CONTACT POINT TO BE MEASURED PER THE FOLLOWING FIGURE:



removed and the shock test performed on the actual test item. If all conditions remain the same, other than the substitution of the test item for the calibration load, the calibration shall then be considered to have met the requirements of the waveform.

NOTE: It is not implied that the waveform generated by the shock machine will be the same when the actual test item is used instead of the calibration load. However, the resulting waveform is considered satisfactory if the waveform with the calibration load was satisfactory.

The frequency response of the complete measuring system, including the transducer through the readout instrument, shall be as specified by Figure 4 of IEC 68-2-27 with the exceptions that $f_1 = 1$ Hz, $f_2 = 4$ Hz, $f_3 = 5$ kHz and $f_4 = 25$ kHz.

For performance levels 1 and 2, the shock applied shall be a half-sine pulse with a 100 g peak amplitude, a 6 millisecond normal duration, and a 3.7 meter per second velocity change. For performance level 3, the shock applied shall be a half-sine pulse with a 50 g peak amplitude, a 6 millisecond normal duration, and a 1.8 meter per second velocity change.

6.6 Salt Fog Corrosion (nonoperating/storage)

IEC 68-2-11-Ka shall be performed to demonstrate compliance with the atmospheric corrosion requirement for the applicable performance levels as shown in Table II. The test exposure duration is 48 hours.

6.7 Mixed Flowing Gas Corrosion (nonoperating/storage)

The ASTM Mixed Flowing Gas test, ASTM B-TBD, shall be performed with 20 days of exposure to 10 ppb chlorine, 10 ppb hydrogen sulfide, 200 ppb or sulfur dioxide, and 200 ppb of nitrogen dioxide at 70 % relative humidity and 30 degrees Celsius. (This test is still being drafted by ASTM Committee B-4 and will be included in 1156.1 when it is available, fourth quarter of 1991).

6.8 Fungus (nonoperating/storage)

IEC 68-2-10-J shall be performed to demonstrate compliance with the fungus requirement for the applicable performance level as shown in Table III.

For modules and components manufactured/assembled only from materials which are known not to support the growth of fungus a certificate of compliance in lieu of testing is acceptable.

6.9 Flammability