NICOMATIC R&D LABORATORY	QUALIFICATION TEST REPORT	QTR18011a
EMM SERIE ACCORDING TO MIL-DTL-83513G STANDARD		Page : 1 /16
		Qualification status : PASSED

CONTACT RESISTANCE (Initial)

According to MIL-DTL-83513G §3.5.6, 4.5.8 and EIA-364-06C test procedure

ISSUE	MODIFICATION	VISA	DATE
a	Original Issue	AJ	21/05/18
b			
c			

	Name	Duty	Date	Visa
Written by	A.JAGHMIM	Test & Measurement Manager	18/05/18	AJ
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Approved by	A.VULLIEZ	R&D Manager	18/05/18	AV
Requested by	J.RIGAT	Project Manager	18/05/18	JR

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1 Conclusion

The EMM connectors are **qualified** regarding CONTACT RESISTANCE (Initial) according to MIL-DTL-83513G standard.

2 Technical Features Proposal

EMM connectors:
Contact Resistance = 8 mOhm max

3 Connate Reports

4 Information about the tests

4.1 Object

The object of this test is to qualify the EMM connectors regarding Contact Resistance according to MIL-DTL-83513G standard.

4.2 Reference documents/Qualification Plan

- MDC.P16020.a
- MIL-DTL-83513G
- EIA-364-06C

4.3 Tested Products

Designation	Article Reference*	Drawing issue*	Batch / DI*	Quantity
C18892-30 (Female, Straight on PCB, E60 guiding)	C18892-30	na	DI7576	20
C18900-30 (Female Straight on PCB, E50)	C18900-30	na	DI7577	20
C18891-30 (Male, Straight on PCB, E10)	C18891-30	na	DI7579	20
C18904-30 (Male, 90° on PCB, E11 guiding)	C18904-30	na	DI7578	20
C18893-30 (Female, 90° on PCB, E61 guiding)	C18893-30	na	DI7580	20
C18901-30 (Female, 90° on PCB, E51 jackscrew)	C18901-30	na	DI7581	20
C18981-30-0250 (Male, on cable AWG30, E01 jackscrew)	C18981-30-0250	na	DI7592	20
C18980-30-0250 (Male, on cable AWG28, E01 jackscrew)	C18980-30-025	na	DI7591	20
C18902-30-0250 (Male, on cable AWG26, E01 jackscrew)	C18902-30-0250	na	DI7588	20
C18979-30-0250 (Male, on cable AWG24, E01 jackscrew)	C18979-30-0250	na	DI7589	20
C18902-30-0250-BP (Male, on cable AWG26, E01 jackscrew BP)	C18902-30-0250-BP	na	DI7586	20
18224-AWG24	18224-AWG24	na	DI7594	25
18224-AWG26	18224-AWG26	na	DI7596	25
18240-AWG28	18240-AWG28	na	DI7597	25
18240-AWG30	18240-AWG30	na	DI7598	25

4.4 Persons present during the tests

Name	Duty
A.JAGHMIM	Test & Measurement Manager

4.5 Date and place of the tests

NICOMATIC France Lab. from 06/02/18 to 07/02/18

4.6 Environmental conditions

Ambient temperature: 23.7°C
Pressure: 972 mbar
Humidity: 31 % HR

4.7 Incidents during the test

None

4.8 Test Equipments

Designation	Calibration Data	
MULTIMETER MX 44 LB03	**Last calibration date**	07/12/17
	Next calibration date	07/12/18

Designation	Calibration Data	
MULTIMETER 117 N°00363	**Last calibration date**	19/07/17
	Next calibration date	19/07/18

4.9 Test Tooling

Designation	Tooling reference
Laboratory Power Supply (5A)	CT53

5 Requirements according to MIL-DTL-83513G standard

Twenty percent, but no less than seven contacts of the mated connectors shall be tested.

The potential drop of each mated pair of pins and sockets shall be measured after temperature stabilization with the specified current flowing through the contacts at an ambient temperature of 25°C ±3°C.

The applicable test circuit shall be as shown on figure 1, and contacts shall be fully mated.

For printed circuit connectors the voltage leads shall be located at the extreme ends of the contacts.

For crimp or solder type contacts that are mated to PC connectors the voltage leads shall be located on the wire, at closest point to contact without touching contact.

MIL-DTL-83513G

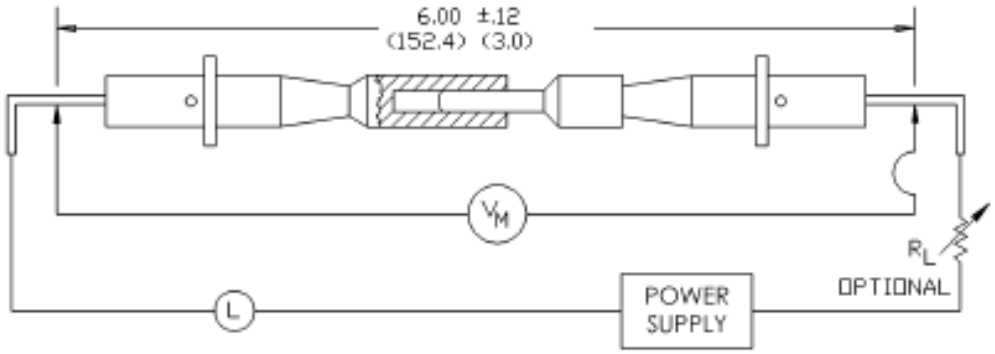


FIGURE 1: Test circuit for measurement of contact resistance.

The contact resistance shall be as shown in table VI.

TABLE VI. Contact resistance (milliohms).

Contact size	Wire size AWG	Milliohms maximum	Wire type
24	26	28	SAE AS22759/11 (stranded)
24	26	32	SAE AS22759/33 (stranded)
24	25	25	A-A-59551 (solid)
24	24	25	A-A-59551 (solid)

6 Test Procedure

With the current OFF, connect the specimen into the test circuit.

Energize the circuit and increase the current until the required test current is achieved. The lowest voltage shall be used that allows the specified test current to be achieved. Unless otherwise specified in the referencing document the output voltage of the current source shall not exceed the rated working voltage of the specimen.

Allow the test specimen to stabilize at the test current.

Connect the voltmeter probes (leads) to the specimen (if not permanently attached) and measure and record the voltage drop. Assure that the test current has remained at the correct value.

When readings are one millivolt or less on small dc measurements, reverse current readings shall be taken. The two measurements shall be averaged to cancel the effects of thermal potentials.

If necessary, adjust power supply to make reverse current equal to forward current.

Measure and record the reverse voltage drop and

Calculate the

$$\text{Specimen voltage drop} = \frac{\text{forward voltage drop} + \text{reverse voltage drop}}{2}$$

Deenergize circuit and disconnect specimen.

Calculate resistance, if required.

7 Test setup

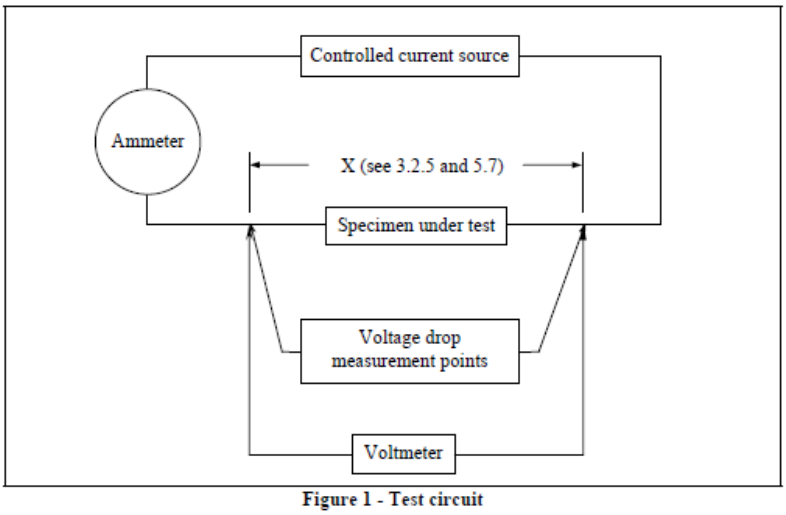
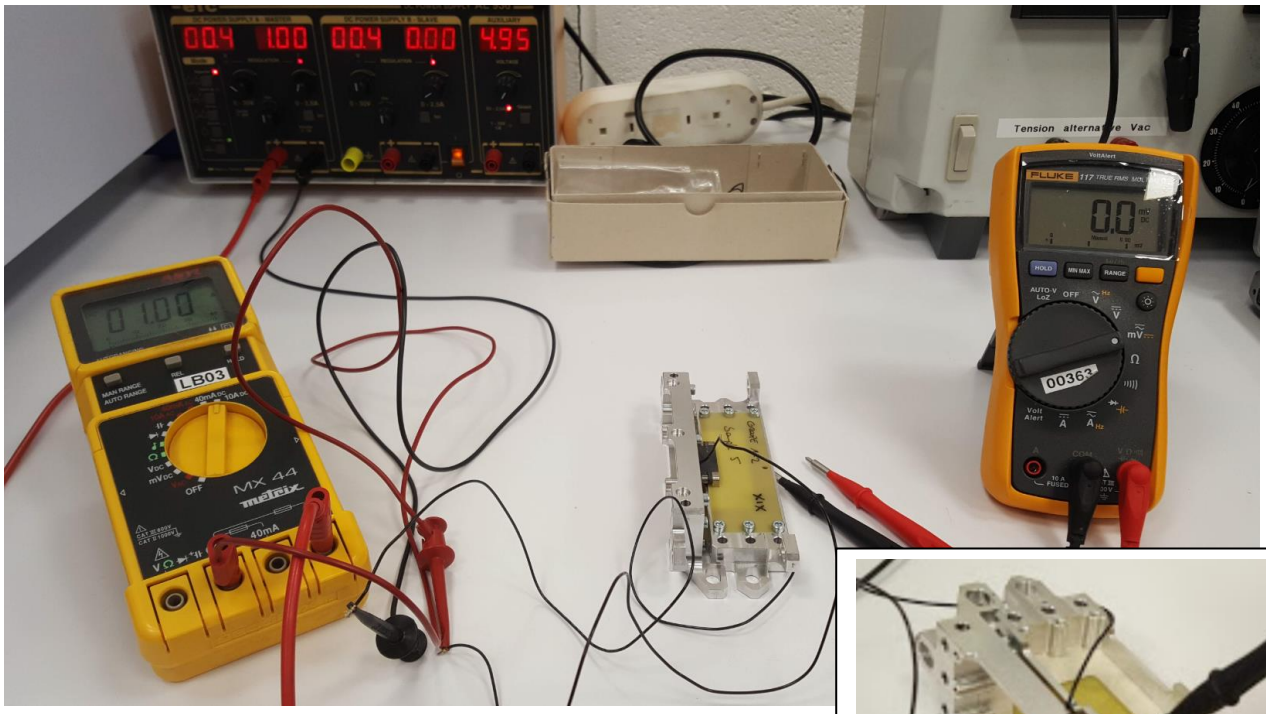
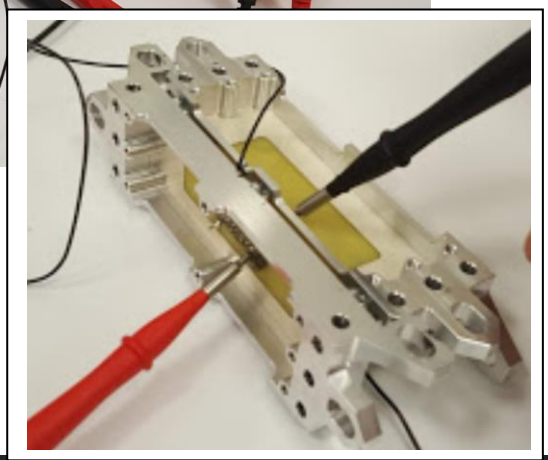


Figure 1 - Test circuit





8 Measurements results

8.1 Resume

	All the sample Resistance (mOhm)
Min	3.45
Max	7.75
Average	5.46

8.2 Details

8.2.1 Couple 1 - C18891-30 + C18892-30

	All the sample Resistance (mOhm)
Min	3.45
Max	5.85
Average	4.66

Sample 1						Sample 2					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	4.00	4.10	4.05	4.05	1	1	4.40	4.60	4.50	4.50
6		4.20	4.30	4.25	4.25	6		4.10	4.10	4.10	4.10
12		4.10	4.00	4.05	4.05	12		4.30	4.60	4.45	4.45
15		5.60	5.50	5.55	5.55	15		4.80	4.90	4.85	4.85
19		5.30	5.40	5.35	5.35	19		4.30	4.50	4.40	4.40
26		4.40	4.50	4.45	4.45	26		5.40	5.10	5.25	5.25
30		4.10	4.30	4.20	4.20	30		4.70	4.80	4.75	4.75
Min	3	4.00	4.00	4.05	4.05	Min	3	4.10	4.10	4.10	4.10
Max	3	5.60	5.50	5.55	5.55	Max	3	5.40	5.10	5.25	5.25
Average	3	4.53	4.59	4.56	4.56	Average	3	4.57	4.66	4.61	4.61

Sample 3						Sample 4					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	4.40	4.40	4.40	4.40	1	1	4.30	4.30	4.30	4.30
6		4.80	4.30	4.55	4.55	6		4.30	4.50	4.40	4.40
12		5.70	6.00	5.85	5.85	12		5.50	5.40	5.45	5.45
15		5.50	5.40	5.45	5.45	15		4.10	4.10	4.10	4.10
19		5.40	5.50	5.45	5.45	19		4.10	4.00	4.05	4.05
26		4.40	4.70	4.55	4.55	26		4.70	4.90	4.80	4.80
30		5.20	5.20	5.20	5.20	30		5.40	5.30	5.35	5.35
Min	3	4.40	4.30	4.40	4.40	Min	3	4.10	4.00	4.05	4.05
Max	3	5.70	6.00	5.85	5.85	Max	3	5.50	5.40	5.45	5.45
Average	3	5.06	5.07	5.06	5.06	Average	3	4.63	4.64	4.64	4.64

Sample 5						Sample 6					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	3.70	3.90	3.80	3.80	1	1	3.90	4.00	3.95	3.95
6		3.40	3.50	3.45	3.45	6		3.90	4.10	4.00	4.00
12		5.80	5.70	5.75	5.75	12		4.60	5.60	5.10	5.10
15		5.00	5.20	5.10	5.10	15		3.70	3.80	3.75	3.75
19		4.60	4.40	4.50	4.50	19		4.70	4.60	4.65	4.65
26		4.80	4.70	4.75	4.75	26		4.60	4.60	4.60	4.60
30		5.70	5.90	5.80	5.80	30		4.60	4.50	4.55	4.55
Min	3	3.40	3.50	3.45	3.45	Min	3	3.70	3.80	3.75	3.75
Max	3	5.80	5.90	5.80	5.80	Max	3	4.70	5.60	5.10	5.10
Average	3	4.71	4.76	4.74	4.74	Average	3	4.29	4.46	4.37	4.37

8.2.2 Couple 2 - C18891-30 with C18893-30

	All the sample Resistance (mOhm)
Min	4.55
Max	7.00
Average	5.74

Sample 1						Sample 2					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	4.70	4.70	4.70	4.70	1	1	4.80	4.60	4.70	4.70
6		5.50	5.50	5.50	5.50	6		5.20	5.60	5.40	5.40
12		6.10	6.10	6.10	6.10	12		5.60	5.60	5.60	5.60
15		6.40	6.50	6.45	6.45	15		5.80	6.20	6.00	6.00
19		5.00	5.00	5.00	5.00	19		4.80	4.70	4.75	4.75
26		5.20	5.00	5.10	5.10	26		4.40	4.70	4.55	4.55
30		5.50	5.50	5.50	5.50	30		5.80	5.90	5.85	5.85
Min	3	4.70	4.70	4.70	4.70	Min	3	4.40	4.60	4.55	4.55
Max	3	6.40	6.50	6.45	6.45	Max	3	5.80	6.20	6.00	6.00
Average	3	5.49	5.47	5.48	5.48	Average	3	5.20	5.33	5.26	5.26

Sample 3						Sample 4					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	5.00	5.00	5.00	5.00	1	1	5.50	5.50	5.50	5.50
6		5.70	5.80	5.75	5.75	6		5.50	5.50	5.50	5.50
12		6.20	6.00	6.10	6.10	12		5.50	5.40	5.45	5.45
15		5.60	5.60	5.60	5.60	15		5.50	5.70	5.60	5.60
19		6.90	6.90	6.90	6.90	19		5.30	5.50	5.40	5.40
26		5.80	6.20	6.00	6.00	26		6.60	6.80	6.70	6.70
30		6.00	6.10	6.05	6.05	30		6.30	6.30	6.30	6.30
Min	3	5.00	5.00	5.00	5.00	Min	3	5.30	5.40	5.40	5.40
Max	3	6.90	6.90	6.90	6.90	Max	3	6.60	6.80	6.70	6.70
Average	3	5.89	5.94	5.91	5.91	Average	3	5.74	5.81	5.78	5.78

Sample 5						Sample 6					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	5.50	5.60	5.55	5.55	1	1	5.60	5.70	5.65	5.65
6		7.00	6.90	6.95	6.95	6		6.30	6.40	6.35	6.35
12		5.40	5.40	5.40	5.40	12		5.90	5.90	5.90	5.90
15		5.20	5.10	5.15	5.15	15		5.10	5.20	5.15	5.15
19		7.00	7.00	7.00	7.00	19		6.80	6.60	6.70	6.70
26		5.70	5.60	5.65	5.65	26		6.20	6.50	6.35	6.35
30		5.60	5.60	5.60	5.60	30		6.80	6.80	6.80	6.80
Min	3	5.20	5.10	5.15	5.15	Min	3	5.10	5.20	5.15	5.15
Max	3	7.00	7.00	7.00	7.00	Max	3	6.80	6.80	6.80	6.80
Average	3	5.91	5.89	5.90	5.90	Average	3	6.10	6.16	6.13	6.13

8.2.3 Couple 3 - C18904-30 with C18893-30

	All the sample Resistance (mOhm)
Min	5.65
Max	7.75
Average	6.68

Sample 1						Sample 2					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	6.90	6.70	6.80	6.80	1	1	6.50	6.50	6.50	6.50
6		7.20	7.20	7.20	7.20	6		7.20	7.00	7.10	7.10
12		6.50	6.50	6.50	6.50	12		5.60	6.00	5.80	5.80
15		6.50	6.40	6.45	6.45	15		6.90	6.80	6.85	6.85
19		7.70	7.80	7.75	7.75	19		6.50	6.60	6.55	6.55
26		6.70	6.70	6.70	6.70	26		6.40	6.50	6.45	6.45
30		7.30	6.90	7.10	7.10	30		6.80	7.00	6.90	6.90
Min	**3**	**6.50**	**6.40**	**6.45**	**6.45**	**Min**	**3**	**5.60**	**6.00**	**5.80**	**5.80**
Max	**3**	**7.70**	**7.80**	**7.75**	**7.75**	**Max**	**3**	**7.20**	**7.00**	**7.10**	**7.10**
Average	**3**	**6.97**	**6.89**	**6.93**	**6.93**	**Average**	**3**	**6.56**	**6.63**	**6.59**	**6.59**

Sample 3						Sample 4					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	5.50	5.80	5.65	5.65	1	1	6.10	6.40	6.25	6.25
6		7.10	7.20	7.15	7.15	6		6.40	6.40	6.40	6.40
12		7.00	6.70	6.85	6.85	12		6.30	6.50	6.40	6.40
15		7.40	7.60	7.50	7.50	15		6.40	6.20	6.30	6.30
19		6.60	6.40	6.50	6.50	19		7.20	7.40	7.30	7.30
26		6.30	6.10	6.20	6.20	26		7.50	7.10	7.30	7.30
30		7.30	6.90	7.10	7.10	30		7.20	7.20	7.20	7.20
Min	**3**	**5.50**	**5.80**	**5.65**	**5.65**	**Min**	**3**	**6.10**	**6.20**	**6.25**	**6.25**
Max	**3**	**7.40**	**7.60**	**7.50**	**7.50**	**Max**	**3**	**7.50**	**7.40**	**7.30**	**7.30**
Average	**3**	**6.74**	**6.67**	**6.71**	**6.71**	**Average**	**3**	**6.73**	**6.74**	**6.74**	**6.74**

Sample 5						Sample 6					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	6.20	5.80	6.00	6.00	1	1	6.40	6.50	6.45	6.45
6		6.80	7.10	6.95	6.95	6		6.40	6.60	6.50	6.50
12		6.70	6.80	6.75	6.75	12		6.10	6.10	6.10	6.10
15		7.10	7.10	7.10	7.10	15		5.60	5.90	5.75	5.75
19		6.10	6.10	6.10	6.10	19		7.20	7.40	7.30	7.30
26		6.40	6.30	6.35	6.35	26		7.00	7.00	7.00	7.00
30		6.50	6.60	6.55	6.55	30		7.10	7.10	7.10	7.10
Min	**3**	**6.10**	**5.80**	**6.00**	**6.00**	**Min**	**3**	**5.60**	**5.90**	**5.75**	**5.75**
Max	**3**	**7.10**	**7.10**	**7.10**	**7.10**	**Max**	**3**	**7.20**	**7.40**	**7.30**	**7.30**
Average	**3**	**6.54**	**6.54**	**6.54**	**6.54**	**Average**	**3**	**6.54**	**6.66**	**6.60**	**6.60**

8.2.4 Couple 4 - C18901-30 with C18979-30-0250

	All the sample Resistance (mOhm)
Min	5.05
Max	6.70
Average	6.00

Sample 1						Sample 2					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	6.00	5.90	5.95	5.95	1	1	5.60	5.70	5.65	5.65
6		5.10	5.00	5.05	5.05	6		5.10	5.00	5.05	5.05
12		6.60	6.70	6.65	6.65	12		5.90	5.80	5.85	5.85
15		6.10	6.10	6.10	6.10	15		6.70	6.40	6.55	6.55
19		6.20	6.40	6.30	6.30	19		5.30	5.30	5.30	5.30
26		6.10	5.60	5.85	5.85	26		5.20	5.50	5.35	5.35
30		5.60	5.80	5.70	5.70	30		6.00	5.80	5.90	5.90
Min	3	5.10	5.00	5.05	5.05	Min	3	5.10	5.00	5.05	5.05
Max	3	6.60	6.70	6.65	6.65	Max	3	6.70	6.40	6.55	6.55
Average	3	5.96	5.93	5.94	5.94	Average	3	5.69	5.64	5.66	5.66

Sample 3						Sample 4					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	5.90	6.10	6.00	6.00	1	1	5.60	5.50	5.55	5.55
6		6.10	6.10	6.10	6.10	6		5.60	5.80	5.70	5.70
12		5.60	5.90	5.75	5.75	12		6.50	6.40	6.45	6.45
15		6.70	6.70	6.70	6.70	15		5.80	6.00	5.90	5.90
19		5.90	6.10	6.00	6.00	19		6.00	5.70	5.85	5.85
26		6.30	6.10	6.20	6.20	26		5.70	5.90	5.80	5.80
30		6.30	6.50	6.40	6.40	30		6.70	6.60	6.65	6.65
Min	3	5.60	5.90	5.75	5.75	Min	3	5.60	5.50	5.55	5.55
Max	3	6.70	6.70	6.70	6.70	Max	3	6.70	6.60	6.65	6.65
Average	3	6.11	6.21	6.16	6.16	Average	3	5.99	5.99	5.99	5.99

Sample 5						Sample 6					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	5.30	5.50	5.40	5.40	1	1	6.60	6.40	6.50	6.50
6		5.50	5.50	5.50	5.50	6		5.20	5.20	5.20	5.20
12		6.00	6.30	6.15	6.15	12		6.40	6.70	6.55	6.55
15		6.10	6.00	6.05	6.05	15		6.20	6.30	6.25	6.25
19		6.30	6.90	6.60	6.60	19		6.50	6.80	6.65	6.65
26		6.70	6.30	6.50	6.50	26		5.80	5.70	5.75	5.75
30		6.50	6.50	6.50	6.50	30		5.90	5.90	5.90	5.90
Min	3	5.30	5.50	5.40	5.40	Min	3	5.20	5.20	5.20	5.20
Max	3	6.70	6.90	6.60	6.60	Max	3	6.60	6.80	6.65	6.65
Average	3	6.06	6.14	6.10	6.10	Average	3	6.09	6.14	6.11	6.11

8.2.5 Couple 5 - C18900-30 with C18979-30-0250

	All the sample Resistance (mOhm)
Min	3.60
Max	5.80
Average	4.58

Sample 1						Sample 2					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	5.70	4.90	5.30	5.30	1	1	4.70	4.90	4.80	4.80
6		4.70	4.40	4.55	4.55	6		4.10	4.10	4.10	4.10
12		5.10	5.20	5.15	5.15	12		4.40	4.50	4.45	4.45
15		3.90	4.00	3.95	3.95	15		4.10	4.20	4.15	4.15
19		5.60	5.60	5.60	5.60	19		4.60	4.40	4.50	4.50
26		5.70	5.40	5.55	5.55	26		3.70	3.80	3.75	3.75
30		4.50	4.60	4.55	4.55	30		3.90	3.70	3.80	3.80
Min	3	3.90	4.00	3.95	3.95	Min	3	3.70	3.70	3.75	3.75
Max	3	5.70	5.60	5.60	5.60	Max	3	4.70	4.90	4.80	4.80
Average	3	5.03	4.87	4.95	4.95	Average	3	4.21	4.23	4.22	4.22

Sample 3						Sample 4					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	5.70	5.90	5.80	5.80	1	1	5.50	5.50	5.50	5.50
6		4.50	4.60	4.55	4.55	6		4.70	4.60	4.65	4.65
12		4.90	4.70	4.80	4.80	12		5.10	5.00	5.05	5.05
15		5.20	5.20	5.20	5.20	15		4.60	4.60	4.60	4.60
19		5.40	5.10	5.25	5.25	19		4.60	4.70	4.65	4.65
26		3.50	3.70	3.60	3.60	26		4.30	4.00	4.15	4.15
30		3.80	3.90	3.85	3.85	30		4.00	4.20	4.10	4.10
Min	3	3.50	3.70	3.60	3.60	Min	3	4.00	4.00	4.10	4.10
Max	3	5.70	5.90	5.80	5.80	Max	3	5.50	5.50	5.50	5.50
Average	3	4.71	4.73	4.72	4.72	Average	3	4.69	4.66	4.67	4.67

Sample 5						Sample 6					
Mated couple						Mated couple					
Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)	Measured contact	Test Current (A)	Voltage Drop (mV)	Reverse Voltage Drop (mV)	Average voltage Drop (mV)	Resistance (mOhm)
1	1	5.50	5.50	5.50	5.50	1	1	5.20	5.20	5.20	5.20
6		4.50	4.60	4.55	4.55	6		4.40	4.30	4.35	4.35
12		4.50	4.40	4.45	4.45	12		4.20	4.00	4.10	4.10
15		4.40	4.50	4.45	4.45	15		4.20	4.30	4.25	4.25
19		4.60	4.50	4.55	4.55	19		5.40	5.30	5.35	5.35
26		4.20	4.00	4.10	4.10	26		3.80	3.90	3.85	3.85
30		3.80	3.90	3.85	3.85	30		3.90	3.90	3.90	3.90
Min	3	3.80	3.90	3.85	3.85	Min	3	3.80	3.90	3.85	3.85
Max	3	5.50	5.50	5.50	5.50	Max	3	5.40	5.30	5.35	5.35
Average	3	4.50	4.49	4.49	4.49	Average	3	4.44	4.41	4.43	4.43

9 Visual Inspection

Required by the applicable standard ?			
YES		NO	☐

**********END OF REPORT**********

10 APPENDIX

Internal use only ?			
YES	☒	NO	☐

10.1 The Laboratory Advice

10.2 Pictures

**********END OF APPENDIX**********