DOCUMENT CHANGE REQUEST

DCR number 361	Changes required for: N/A	Originator: Jean-Laurent BOUTEAUX
Date: 2007/06/19	Date sent: 2007/06/19	Organisation: CNES
Status: IMPLEMENTED		

Title:	Contacts Electrical Crimp for 3401/052 and /056 Connectors		
Number:	3401/058	Issue:	1

Other documents affected:

Page:

Page:7 ; Table (1a) "contact retention force max"

Paragraph:

Page:7 ; Table (1a) "contact retention force max"

Original wording:

Proposed wording:

For male and female contact size 8, variant 09 and 10 replace "150" by "111" (see sheet attached)

Justification:

To be in accordance with MIL DTL 38999 K requirements , table XVII, contact retention (see sheet attached)

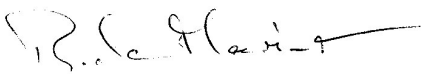
Attachments:

DCR_3401_058.PDF, null

Modifications:

N/A

Approval signature:



Date signed:

2007-06-19

TABLE 1(a) - TYPE VARIANTS (CONTINUED)

VAR-IANT	TYPE	MATING END SIZE	CRIMP BARREL SIZE	RATED CUR-RENT	ACCEPT WIRE	MAX WEIGHT	ENGAGEMENT & SEPARATION		CONTACT CAPABILITY				CON-TACT RETENT. FORCE MAX	CONTACT INSERT WITHDR. FORCES MAX	PROBE DAMAGE			OVERSIZE PIN EXCL.		
									TEST PIN DIA mm		WEIGHT				MO-MENT	PROBE DIA mm		FORCE MAX	TEST PIN DIA mm	
							ENGAG. max	SEPAR. min			Pick-up	Drop								
				A	AWG	g	N (1)	N (1)	min	max	g (2)	g (3)	N	N	N.cm	min	max	N	min	max
09	Male	8	8	46	8	3.5	-	-	-	-	-	-	~~150~~ 111	150	-	-	-	-	-	-
10	Female				10	5.0	9.9 8.0	1.1 1.1	3.629 3.581	3.632 2.583	- 110	800 -	~~150~~ 111	150	50	3.594	3.619	10	4.00	4.01
11	Male	4	4	80	6	6.0	-	-	-	-	-	-	180	190	-	-	-	-	-	-
12	Female				4	7.5	20.4 16.0	2.2 2.2	5.737 5.689	5.740 5.692	- 220	1600 -	180	190	50	5.702	5.727	15	6.10	6.11
13	Male	4	8	46	8	6.5	-	-	-	-	-	-	180	190	-	-	-	-	-	-
14	Female				10	8.0	20.4 16.0	2.2 2.2	5.737 5.689	5.740 5.692	- 220	1600 -	180	190	50	5.702	5.727	15	6.10	6.11

NOTES

1. 1st line with maximum diameter test pin; 2nd line with minimum diameter test pin.
2. With minimum diameter test pin and minimum insertion depth of 4mm.
3. With maximum diameter test pin and minimum insertion depth of 4mm.

a. Number of samples - The test shall be performed on 20 percent of the contact complement; but not less than three contacts in each connector half.

b. Applied axial load - Preload to 3 pounds maximum, (13.6 newtons). Apply load as specified in table XVII.

c. Special requirements - Where the test sequence required maintenance aging prior to contact retention, the contacts which were subjected to maintenance aging shall also be selected for contact retention.

d. Axial direction - The applicable forces shall be applied along the longitudinal axis of individual contacts in the direction tending to displace the contacts to the rear.

e. Only the contacts to be tested need be installed in the connector.

4.5.19.2 Procedure II. The contact retention shall be tested as specified in method 2007 of MIL-STD-1344. The following details and exceptions shall apply:

a. 4.5.19.1a through 4.5.19.1c apply.
b. Axial direction - Same as 4.5.19.1d, except the direction shall tend to displace the contacts to the front.
c. Only the contacts to be tested need be installed in the connector.

TABLE XVII. Contact retention.

Contact	Load ±10 percent	
	Pounds	Newtons
22 1/, 22D, 22M 1/	10	44
20	15	67
16	25	111
12	25	111
8	25	111
10	25	111
8 Triax	25	111

1/ Inactive for new design.

4.5.20 Altitude-low temperature (see 3.24). Wired, mated, assembled connectors shall be subjected to the test specified in method 1011 of MIL-STD-1344. The following details apply:

a. No wire ends or splices inside the chamber.

b. Dielectric withstanding voltage test to be performed after return to ambient conditions shall be in accordance with 4.5.10.1.

c. Insulation resistance test to be performed at 100,000 feet at -65°C and shall be in accordance with 4.5.9.1.

4.5.21 Accessory thread strength (see 3.25). The mated connector shall be mounted as in normal service to a rigid panel. The torque wrench shall be attached as shown on figure 23. After mating the plug and receptacle connectors, a torque shall be applied to the accessory end of the plug at a rate of approximately 10 pounds-inches per second until the required torque is achieved. The applied load shall be held for 1 minute, then the load shall be released. The test shall then be repeated on the accessory end of the receptacle.