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MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

November 2, 2016

SUBJECT: Initial Draft(s) of: MIL-DTL-21097G, /2, /3, /4, /5, /14, /15
Project Number(s): 5935-2017-006, -007, -008, -009, -010, -011, -012

These initial draft(s) for these subject document(s), are now available for viewing and downloading from the DLA Land and Maritime-VA Web site:

<https://landandmaritimeapps.dla.mil/programs/milspec/default.aspx>

Major changes to these document(s) include:

MIL-DTL-21097G – 1. Amend NGSs - replace ASTM B488 with MIL-DTL-45204, amend EIA577 to SAE, IPC-D275 to IPC-2221, and NCSL-Z540.1 to Z540.3.

2. Amend URLs.

3. Remove EPA paragraph 6.6.

4. Replace AF 11 with AF 85.

5. Apply MIL-STD-961 updates.

MIL-DTL-DTL-21097/2/3/4/5/14/15 - Amend ASTM B488 to MIL-DTL-45204. Update Assist URL and AF 11 to AF 85.

MIL-DTL-21097/3/14/15 - Amend IPC-D275 with IPC-2221.

Concurrence or comments are required at this Center within 45 days from the date of this letter. Late comments will be held for the next coordination of the document. Comments from military departments must be identified as either "Essential" or "Suggested". Essential comments must be justified with supporting data. Military review activities should forward comments to their custodians of this office, as applicable, in sufficient time to allow for consolidating the department reply. Lack of response to this draft will be construed as concurrence. **Since Navy-EC is the custodian for this document, all Navy review activities should forward their comments directly to this Center.**

If these document(s) are of interest to you, please provide your comments or suggested changes. The point of contact for this document is Ed Wypasek, phone number 614-692-0530, facsimile transmission, 614-692-6939, e-mail edmund.wypasek@dla.mil, or may be mailed via the US Postal Service to DLA LAND AND MARITIME, ATTN: VAI (Attention: Ed Wypasek), P.O. Box 3990, Columbus, OH 43218-3990.

Sincerely,

/ *SIGNED* /

ABDONASSER M. ABDOUNI
Chief,
Interconnection Branch

Note: This draft dated 2 November 2016, prepared by DLA Land and Maritime-VAI has not been approved and is subject to modification. DO NOT USE PRIOR TO APPROVAL. (Project 5935-2017-011)

INCH-POUND

MIL-DTL-21097/14F
w/AMENDMENT
DRAFT
SUPERSEDING
MIL-DTL-21097/14F
18 August 2005

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, PRINTED WIRING BOARD
MALE ADAPTER, CONTACT SPACING: 0.200, ALTERNATE DUAL ROW,
TYPE CS, BLADE CONTACT (MOUNTING PROVISION A)

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-21097.

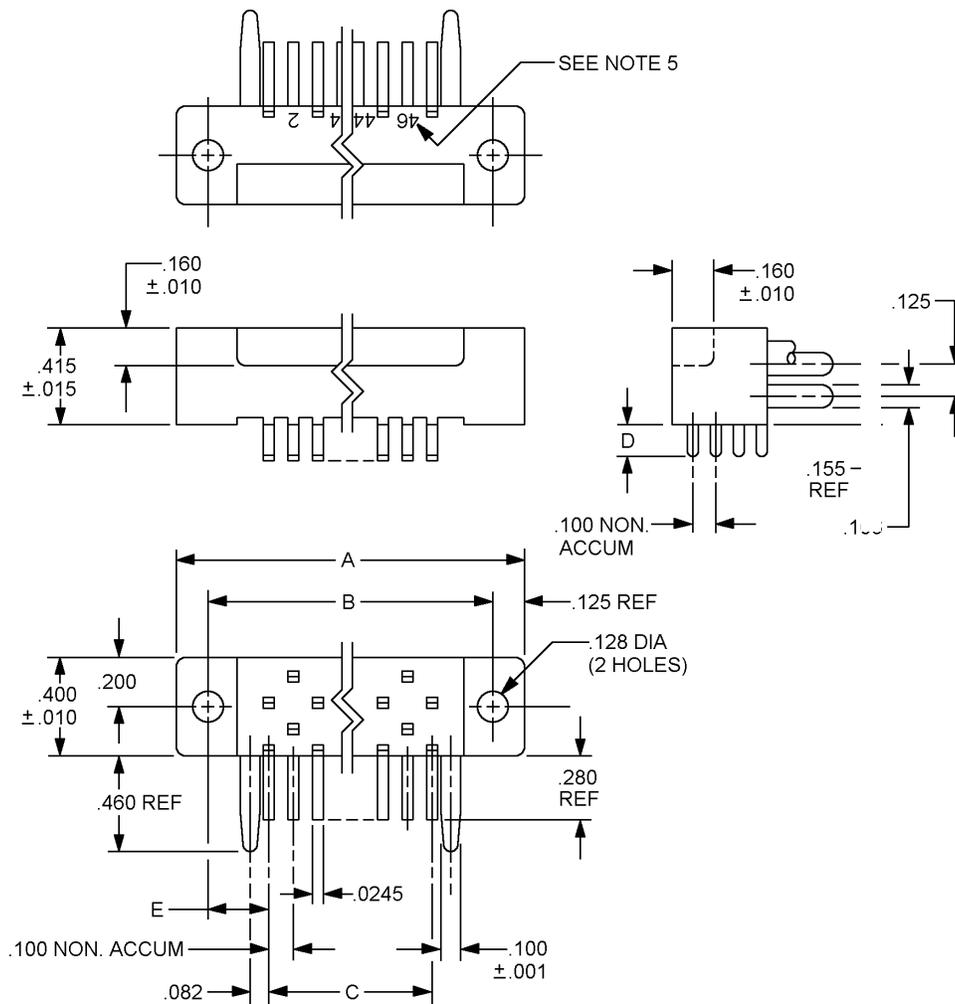


FIGURE 1. Blade contact type CS alternate dual row contacts.

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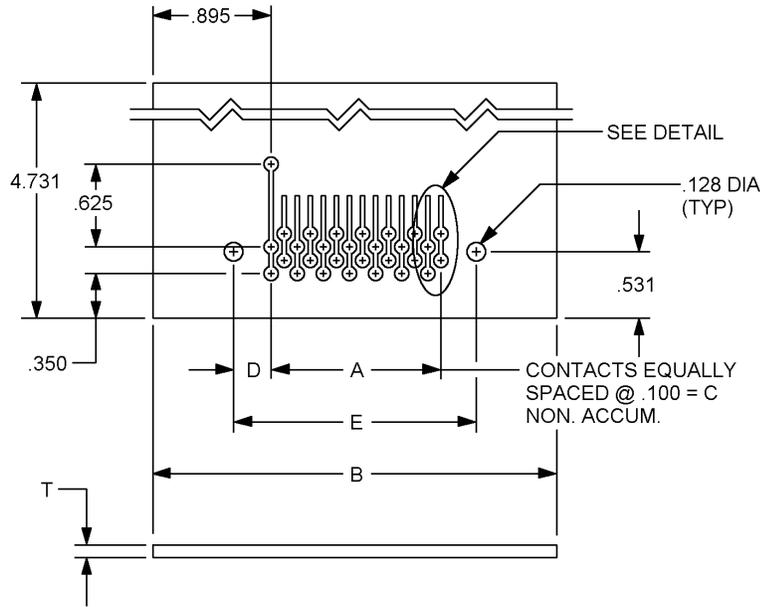
Inches	mm	Inches	mm
.001	0.03	.128	3.25
.010	0.25	.155	3.94
.015	0.38	.160	4.06
.0245	0.622	.200	5.08
.082	2.08	.280	7.11
.100	2.54	.400	10.16
.106	2.69	.415	10.54
.125	3.18	.460	11.68

NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerance is $\pm .005$ (.13 mm) for three place decimals.
3. Metric equivalents are given for information only.
4. See table I for dimensions.
5. All even numbered contacts to be identified with .047 (1.19 mm) minimum high characters, as shown.

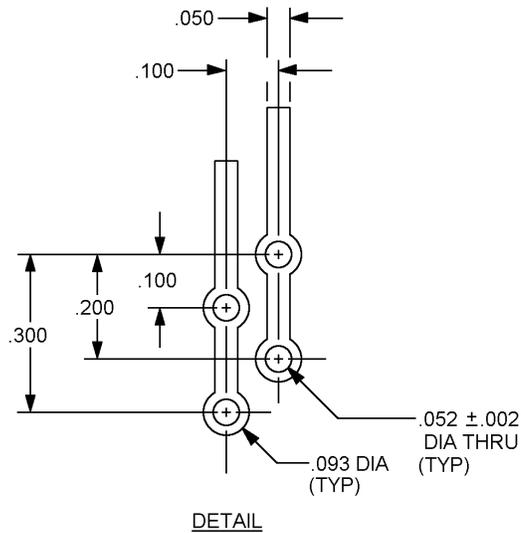
FIGURE 1. Blade contact type CS alternate dual row contacts - Continued.

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Printed wiring board	
Size	T dim
2	.062 (1.57)
3	.093 (2.36)
4	.125 (3.18)

Inches	mm	Inches	mm
.002	0.05	.300	7.62
.050	1.27	.350	8.89
.052	1.32	.531	13.49
.093	2.36	.625	15.88
.100	2.54	.895	22.73
.128	3.25	4.731	120.17
.200	5.08		



NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerance is $\pm .005$ (.13 mm) for three-place decimals.
3. Metric equivalents are given for information only.
4. See table II for dimensions B, C, D, and E.

FIGURE 2. Printed wiring test board.

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TABLE I. Connector, electrical, male adapter, type CS, class b, mounting provision A.

Dash number	Style	Size	Dimensions (inches) ^{1/}				
			A (maximum)	B ±0.007 (0.18)	C	D ±0.010 (0.25)	E
01	17	2				0.120 (3.05)	
02	17	3	2.390 (60.71)	2.130 (54.10)	1.600 (40.64)	0.152 (3.86)	0.265 (6.73)
03	17	4				0.183 (4.65)	
04	23	2				0.120 (3.05)	
05	23	3	2.990 (75.95)	2.730 (69.34)	2.200 (55.88)	0.152 (3.86)	0.265 (6.73)
06	23	4				0.183 (4.65)	
07	29	2				0.120 (3.05)	
08	29	3	3.590 (91.19)	3.330 (84.58)	2.800 (71.12)	0.152 (3.86)	0.265 (6.73)
09	29	4				0.183 (4.65)	
10	35	2				0.120 (3.05)	
11	35	3	4.190 (106.43)	3.930 (99.82)	3.400 (86.36)	0.152 (3.86)	0.265 (6.73)
12	35	4				0.183 (4.65)	
13	41	2				0.120 (3.05)	
14	41	3	4.790 (121.67)	4.530 (115.06)	4.000 (101.60)	0.152 (3.86)	0.265 (6.73)
15	41	4				0.183 (4.65)	
16	47	2				0.120 (3.05)	
17	47	3	5.623 (142.82)	5.363 (136.22)	4.600 (116.84)	0.152 (3.86)	0.265 (6.73)
18	47	4				0.183 (4.65)	

^{1/} Dimensions are in inches. Metric equivalents are given for information only.

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TABLE II. Printed wiring test board.

Style	Dimensions (inches) ^{1/}			
	B	C	D	E
17	3.390 (86.101)	1.600 (40.64)	.265 (6.73)	2.130 (54.10)
23	3.990 (101.345)	2.200 (55.88)	.265 (6.73)	2.730 (69.34)
29	4.590 (116.589)	2.800 (71.12)	.265 (6.73)	3.330 (84.58)
35	5.190 (131.823)	3.400 (86.36)	.265 (6.73)	3.930 (99.82)
41	5.790 (147.067)	4.000 (101.60)	.265 (6.73)	4.530 (115.06)
47	6.390 (162.231)	4.600 (116.84)	.265 (6.73)	5.363 (136.22)

^{1/} Millimeters are in parentheses.

REQUIREMENTS

Dimensions and configurations: See figure 1 and table I.

Contacts material: Gilding metal brass in accordance with copper alloy number UNS C21000 of ASTM B36.

Mating receptacle: Shall be in accordance with MIL-DTL-21097/13.

Printed wiring test board: Two-ounce copper one side only, gold plated as specified in IPC-D-275 ~~2221~~. Board shall conform to IPC-D-275 ~~2221~~ and MIL-PRF-31032. See figure 2 for the applicable connector size.

Finish: Shall be in accordance with MIL-DTL-21097.

Part or Identifying Number (PIN): M21097/14-(dash number from table I).

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Referenced documents. In addition to MIL-DTL-21097, this document references the following:

- MIL-DTL-21097/13
- MIL-PRF-31032
- ASTM B36
- IPC-D-275 ~~2221~~

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CONCLUDING MATERIALS

Custodians:

Army – CR
Navy – EC
Air Force – ~~44~~ 85
DLA – CC

Preparing activity:

DLA - CC

(Project 5935-2017-011)

Review activities:

Army – AR, AT, CR4, MI
Navy – AS, MC, OS

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.daps-dla.mil>.