

INCH-POUND
MIL-PRF-83513/2F
15 August 1997
SUPERSEDING
MIL-C-83513/2E
31 March 1989

PERFORMANCE SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, RECTANGULAR, RECEPTACLE, MICROMINIATURE,
POLARIZED SHELL, SOCKET CONTACTS, CLASS M, SOLDER TYPE,

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-PRF-83513.

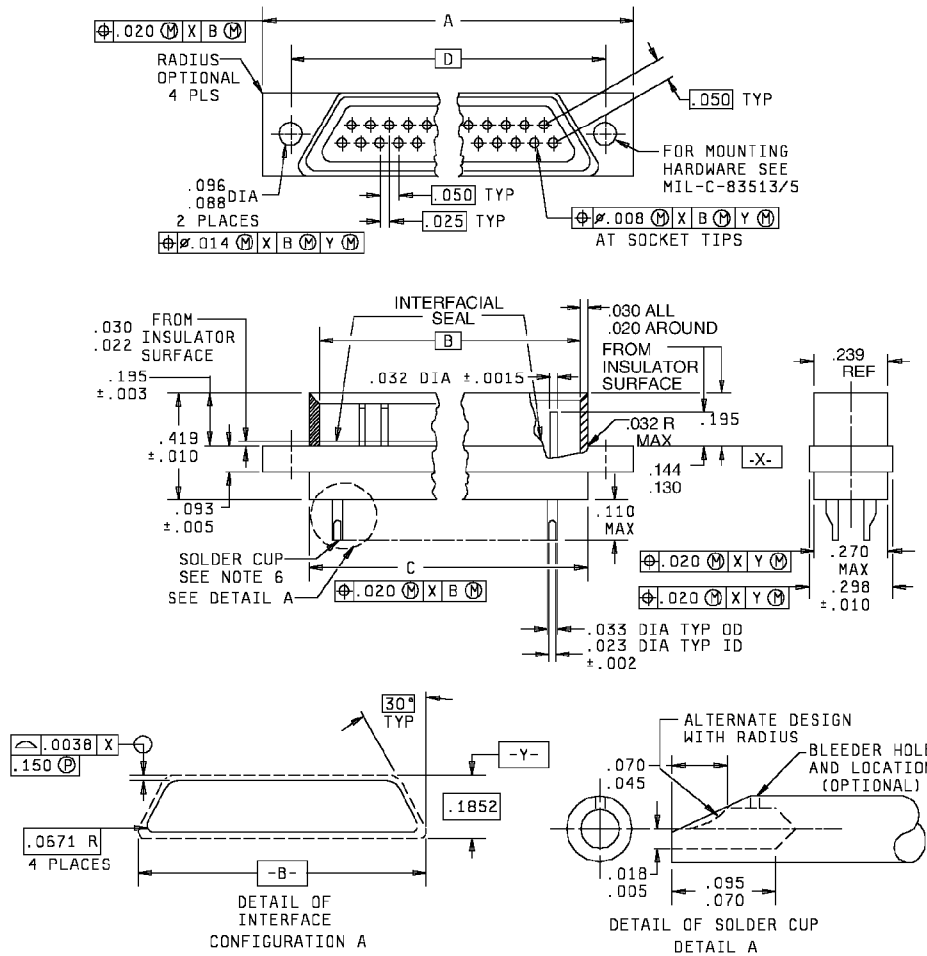


FIGURE 1. Connector, receptacle, .050 spacing.

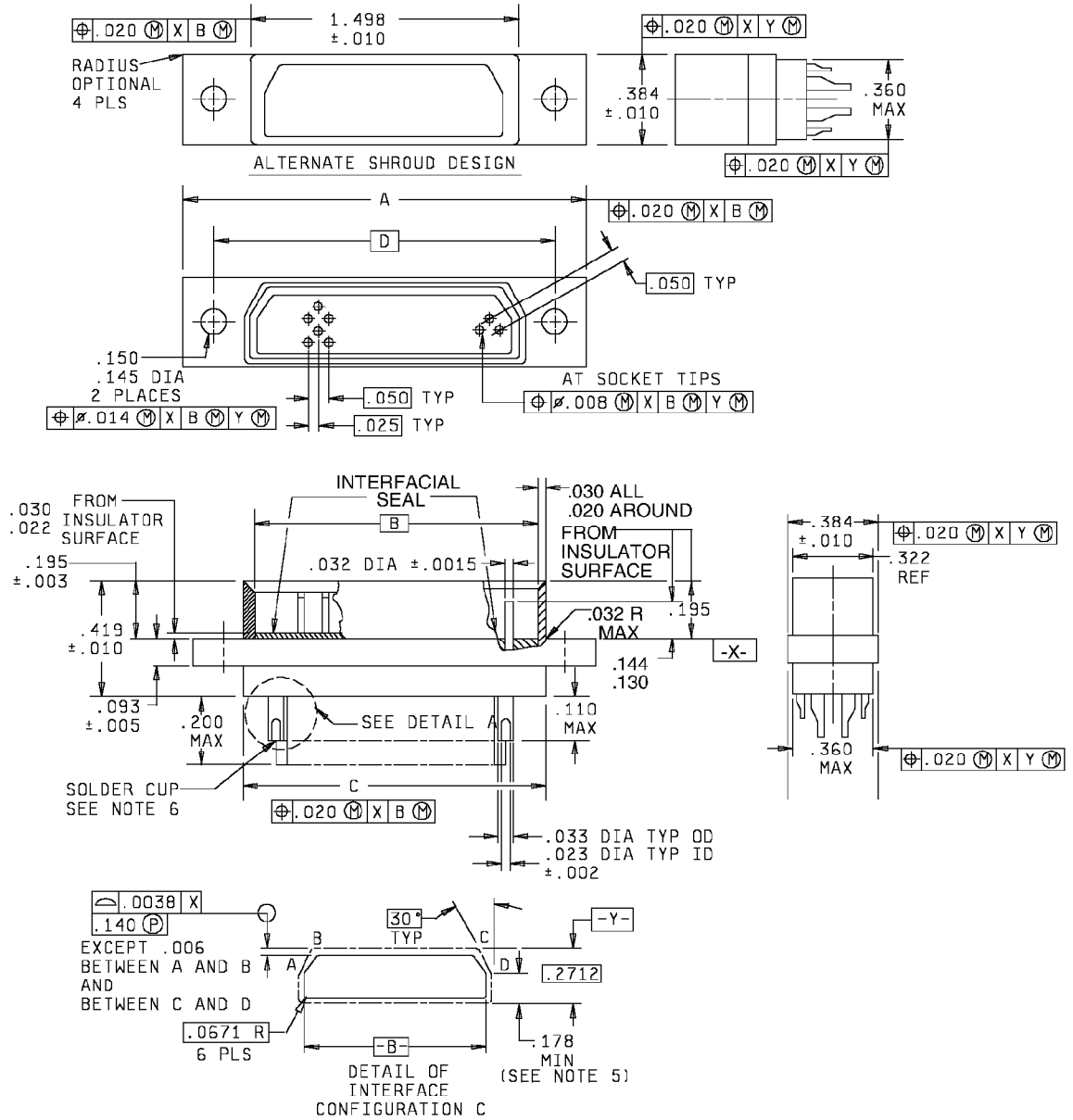


FIGURE 1. Connector, receptacle .050 spacing - Continued.

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Number of cavities	A $\pm .010$ (.25)	B BSC	C $+ .010$ $-.018$ $+(.25)$ $-(.46)$	D BSC	Config letter
9	.775 (19.68)	.3342 (8.489)	.390 (9.91)	.565 (14.35)	A
15	.925 (23.50)	.4842 (12.299)	.540 (13.72)	.715 (18.16)	A
21	1.075 (27.30)	.6342 (16.109)	.690 (17.53)	.865 (21.97)	A
25	1.175 (29.84)	.7342 (18.649)	.790 (20.07)	.965 (24.51)	A
31	1.325 (33.66)	.8842 (22.459)	.940 (23.88)	1.115 (28.32)	A
37	1.475 (37.46)	1.0342 (26.269)	1.090 (27.69)	1.265 (32.13)	A
51	1.425 (36.20)	.9842 (25.00)	1.040 (26.42)	1.215 (30.86)	B
100	2.160 (54.86)	1.3842 (35.159)	1.432 (36.37)	1.800 (45.72)	C

Inches	mm	Inches	mm
.0015	0.038	.095	2.41
.002	0.05	.100	2.54
.003	0.08	.110	2.79
.0035	0.089	.117	2.97
.0038	0.097	.123	3.12
.004	0.10	.130	3.30
.005	0.13	.144	3.36
.006	0.15	.145	3.68
.007	0.18	.150	3.81
.008	0.20	.180	4.57
.010	0.25	.1852	4.704
.014	0.36	.189	4.80
.015	0.38	.193	4.90
.018	0.46	.195	4.95
.020	0.51	.200	5.08
.022	0.56	.2282	5.796
.025	0.64	.232	5.89
.030	0.76	.239	6.07
.032	0.81	.270	6.86
.033	0.84	.2712	6.888
.045	1.14	.275	6.99
.050	1.27	.281	7.14
.0671	1.704	.298	7.57
.069	1.75	.310	7.87
.070	1.78	.322	8.18
.088	2.24	.341	8.66
.090	2.29	.360	9.14
.0926	2.352	.384	9.75
.093	2.36	.419	10.64
.094	2.39	1.498	37.95

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are $\pm .005$ (0.13 mm).
4. Metric equivalents are in parentheses or columns.
5. Dimension line at point D located the point of intersection of the two adjacent side of the receptacle interface.
6. 26 AWG wire is the maximum wire size that can be used in the solder cup.

FIGURE 1. Connector, receptacle, .050 spacing - Continued.

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REQUIREMENTS:

Dimensions and configurations: See figure 1. This specification sheet describes the socket side of a rectangular metal shell connector. This connector uses reverse gender contact, i.e., the live pin recessed in the insulator with the static socket protruding from a shrouded interface.

Material and finish:

Interfacial seal: Silicone rubber, or fluorosilicone rubber or blend thereof.

Contact identification: See figure 2 for contact layout numbering.

Contact connection: The pin contact (being recessed in the insulator) is normally connected to the live side of the circuit.

Current rating, maximum: 3 amperes per contact.

Mounting and mating hardware: Mounting hardware is to be ordered separately. For insert arrangements A through G, use MIL-PRF-83513/5, configurations A and B. For insert arrangement H, use MIL-PRF-83513/5, configuration C (see figure 2).

Mating plug: Shall conform to MIL-PRF-83513/1 or MIL-PRF-83513/3.

Part or Identifying Number (PIN): PIN shall consist of the letter M, the basic number of the specification sheet, a letter from the insert column and the shell finish.

M83513/02 -
Specification sheet number

A
Insert arrangement
(see figure 2)

C
Shell finish
(Interface critical)

C = Cadmium
N = electroless nickel
(space applications only)

- A = 9
- B = 15
- C = 21
- D = 25
- E = 31
- F = 37
- G = 51
- H = 100

CONCLUDING MATERIAL

Custodians:
Army - CR
Navy - EC
Air Force - 85
NASA - NA

Preparing activity:
DLA - CC

Review activities:
Army - AT, MI
Navy - AS, CG, MC, SH
Air Force - 17, 99

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