

MILITARY SPECIFICATION SHEET

CONNECTORS, PRINTED CIRCUIT SUBASSEMBLY AND ACCESSORIES:
 RECEPTACLE, STRAIGHT-THRU, HERMAPHRODITIC CONTACT,
 WRAPPOST REMOVABLE, FOR PRINTED WIRING BOARDS (.100 INCH SPACING)

This specification is approved for use by the Communications Research and Development Command, Department of the Army and is available for use by all Departments and Agencies of the Department of Defense.

The complete requirements for acquiring the connectors described herein shall consist of this specification and the latest issue of MIL-C-55302.

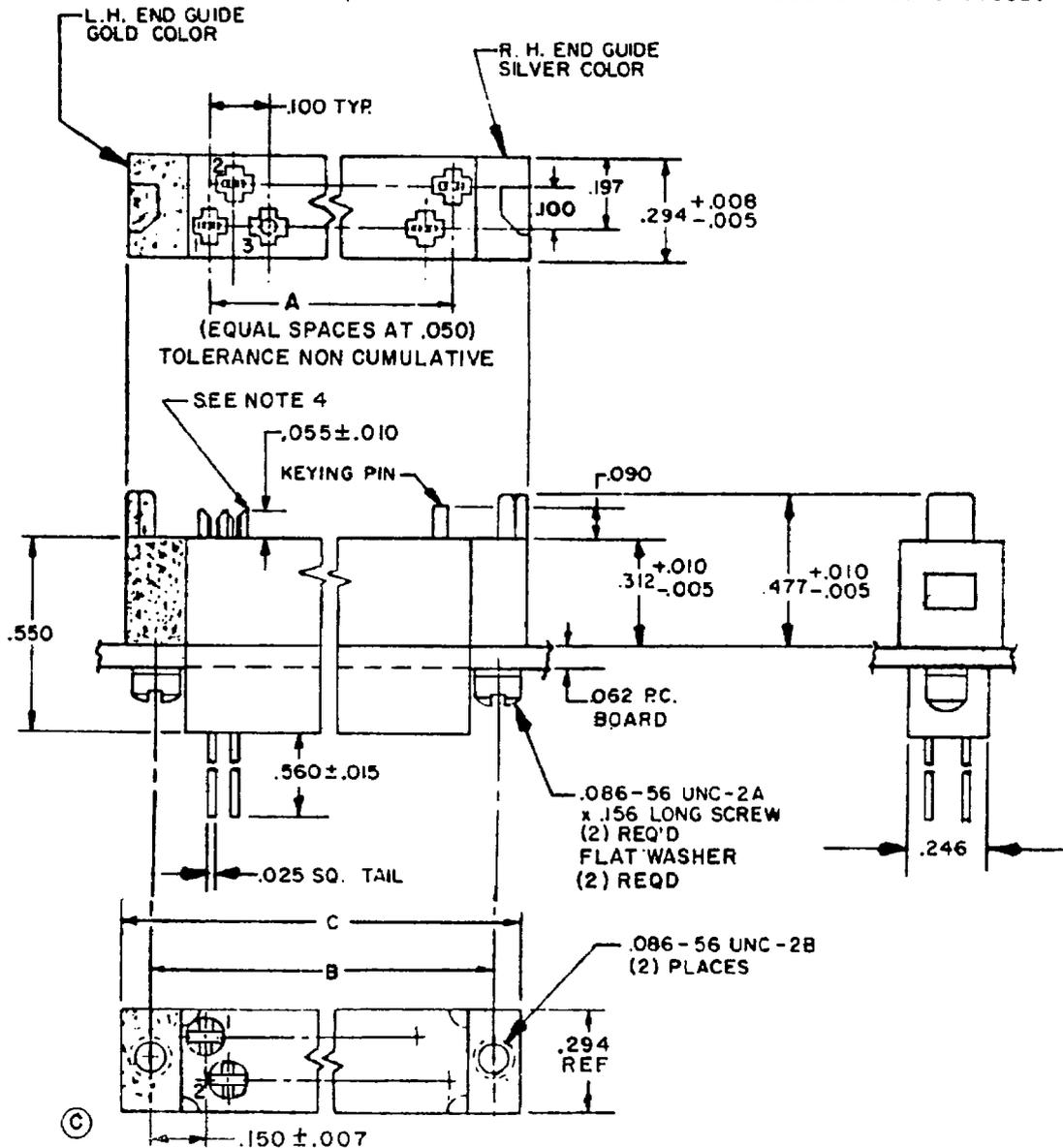


FIGURE 1. Connector, receptacle (.100 spacing).

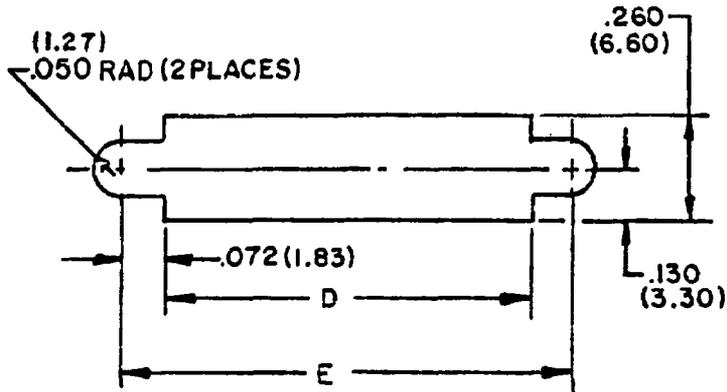
(C) denotes changes

INCHES	MM	INCHES	MM
.005	.13	.100	2.54
.007	.18	.150	3.81
.008	.20	.156	3.96
.010	.25	.197	5.00
.015	.38	.246	6.25
.025	.64	.273	6.93
.050	1.27	.294	7.47
.055	1.40	.312	7.92
.062	1.57	.477	12.12
.086	2.18	.550	13.97
.090	2.29	.560	14.22

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.
3. Unless otherwise specified, tolerance is ± 0.005 (.13 mm).
4. With connectors fully engaged the mating contacts shall have a minimum overlap distance of .062. As a minimum the contacts shall exhibit a wiping action through this distance.

FIGURE 1. Connector, receptacle (.100 spacing) - Continued.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.
3. Metric equivalents are in parentheses.

FIGURE 2. Typical cutout for receptacle in nonconductive chassis.

TABLE I. Dash number and dimensions.

Dash number <u>1/</u>	No. of contacts	*Dimensions (inches)				
		A	B ±.010	C Ref.	D	E
01	18	.850 (21.59)	1.150 (29.21)	1.300 (33.02)	1.006 (25.55)	1.150 (29.21)
02	30	1.450 (36.83)	1.750 (44.45)	1.900 (48.26)	1.606 (40.79)	1.750 (44.45)
03	36	1.750 (44.45)	2.050 (52.07)	2.200 (55.88)	1.906 (48.41)	2.050 (52.07)
04	42	2.050 (52.07)	2.350 (59.69)	2.500 (63.50)	2.206 (56.03)	2.350 (59.69)
05	54	2.650 (67.31)	2.950 (74.93)	3.100 (78.74)	2.806 (71.27)	2.950 (74.93)
06	72	3.550 (90.17)	3.850 (97.79)	4.000 (101.60)	3.706 (94.13)	3.850 (97.79)

1/ See requirements for complete part number when keying pin is required.

* Metrics are in parentheses.

REQUIREMENTS:

Dimensions and configuration: See figures 1 and 2, and table I.

Material and finish:

Insulator: MIL-M-14, type SDG-F.

End guides: Left hand, sintered brass 90/10, clear chromate per MIL-C-5541, class 1A. Right hand, sintered brass 90/10, nickel plate 300 microinches per MIL-F-14072.

Keying pin: Aluminum alloy 2011-T3 with clear chromate per MIL-C-5541, class 1A.

Mounting screw: Brass, cadmium plated, gold chromate finish.

Flat washer: Stainless steel.

Contact identification: Contact locations are identified in numerical sequence (see figure 1).

Mating and unmating: The maximum insertion force, in pounds, shall not exceed a value equal to .5 times the number of contacts, and the withdrawal force, in pounds, shall be a minimum of .11 times the number of contacts and shall not exceed the measured insertion force.

Contact retention: 6.0 pounds minimum after five insertions and withdrawals from the same connector position.

Wrappost: Wrappost contacts shall meet the requirements of MIL-STD-1130.

Contact resistance: The contact resistance shall not exceed 20 milliohms.

Dry circuit: Connectors shall be tested in accordance with method 3002 of MIL-STD-1344. The contact resistance shall not exceed 20 milliohms.

Dielectric withstanding voltage:

Sea level: 1,000 volts rms, 60 hertz.

High altitude: 300 volts rms, 60 hertz.

Current rating, maximum: 5 amperes.

Keying: When required, one of the following codes shall be added to the dash number:

"P" - Specifying location by contact number where keying pin shall be inserted; for example, M55302/99-01P17. (Keying pin inserted in place of contact number 17.)

"H" - Specifying location by contact number where contact shall be omitted for mating; for example, M55302/99-01H17. (Keying pin hole has contact number 17 omitted.)

Contacts: Shall conform to MIL-C-55302/98.

Contact removal tool: Shall conform to MIL-I-81969/4.

Contact insertion tool: Shall conform to MIL-I-81969/5.

Mating plug: Shall conform to MIL-C-55302/53, MIL-C-55302/54, MIL-C-55302/100, MIL-C-55302/101, MIL-C-55302/103, or MIL-C-55302/104.

Part number: M55302/99-(dash number from table I).

Custodians:
Army - CR

Review activities:
Army - AT, AV, MI
DLA - ES

User activities:
Army - AR, ME

Agent:
DLA - ES

Preparing activity:
Army - CR

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