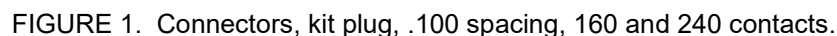


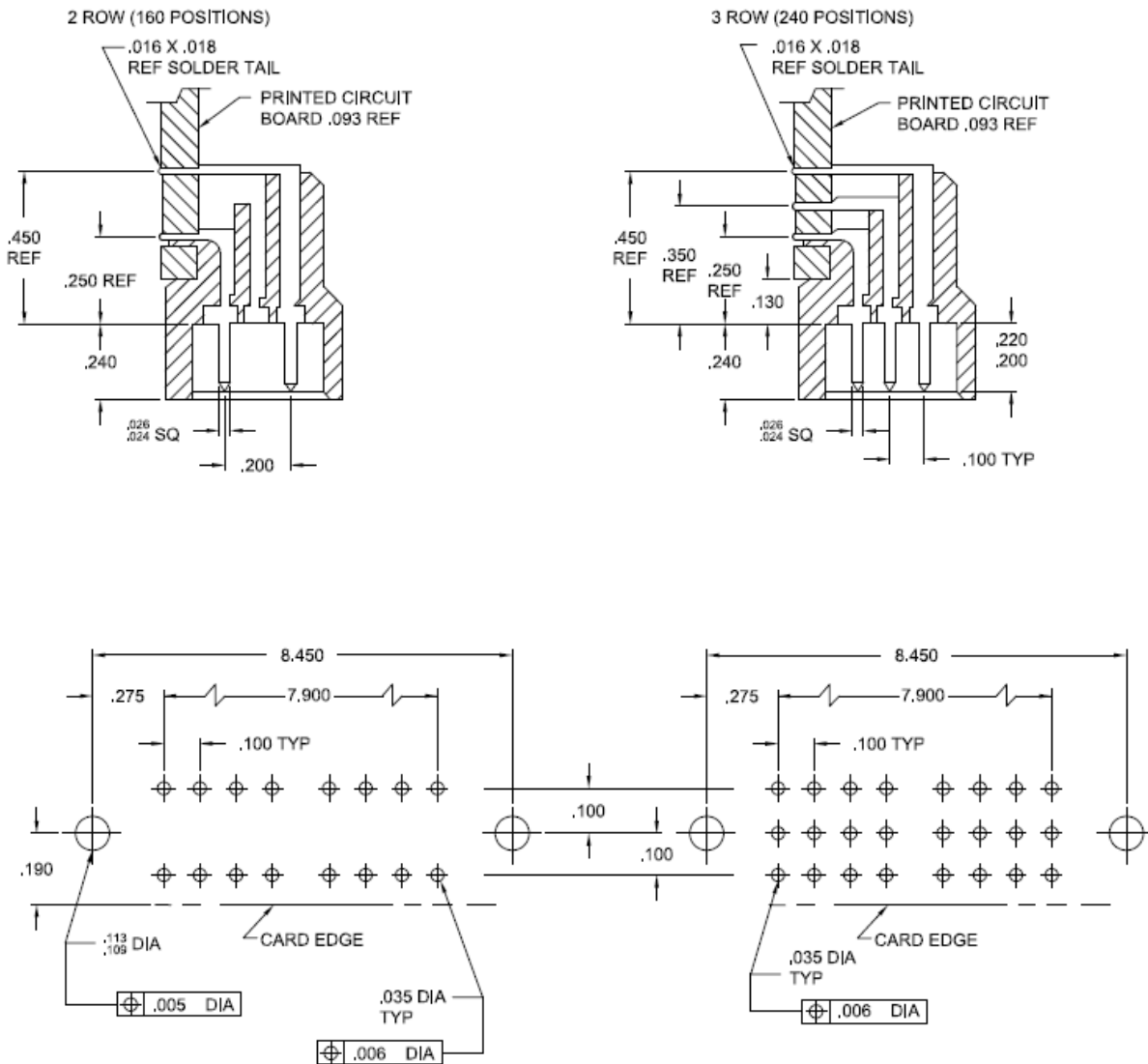
MIL-DTL-55302/129E
w/AMENDMENT 1
9 September 2025
SUPERSEDING
MIL-DTL-55302/129E
30 January 2024

CONNECTORS, PRINTED CIRCUIT SUBASSEMBLY AND ACCESSORIES:
PLUG, RIGHT ANGLE, 90 THROUGH 240 CONTACT POSITIONS,
FOR PRINTED WIRING BOARDS (.100 INCH SPACING)

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-55302.



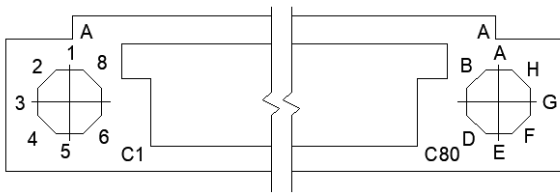
MIL-DTL-55302/129E
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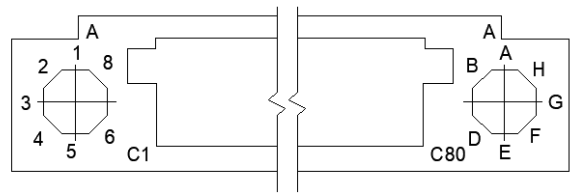
Recommended circuit layouts

FIGURE 1. Connectors, kit plug, .100 spacing, 160 and 240 contacts – Continued.

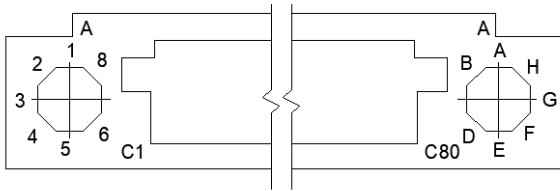
MIL-DTL-55302/129E
w/AMENDMENT 1



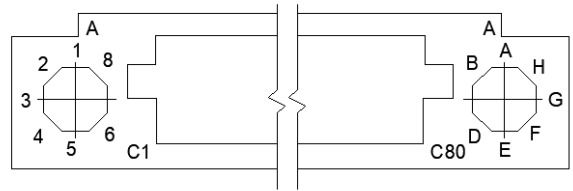
TYPE I



TYPE II



TYPE III



TYPE IV

POLARIZATION

NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerances are $\pm .005$ on three place decimals and $\pm .2^\circ$ on angles.
3. These connectors mate with connectors specified in MIL-DTL-55302/130.
4. Numbers indicating end cavities marked or molded both sides. Lines indicating every five cavities marked or molded on mating face, except end cavities.
5. Location indicators embossed on surface.
6. Letters indicating rows and numbers indicating end cavities marked or molded this surface.

FIGURE 1. Connectors, kit plug, .100 spacing, 160 and 240 contacts – Continued.

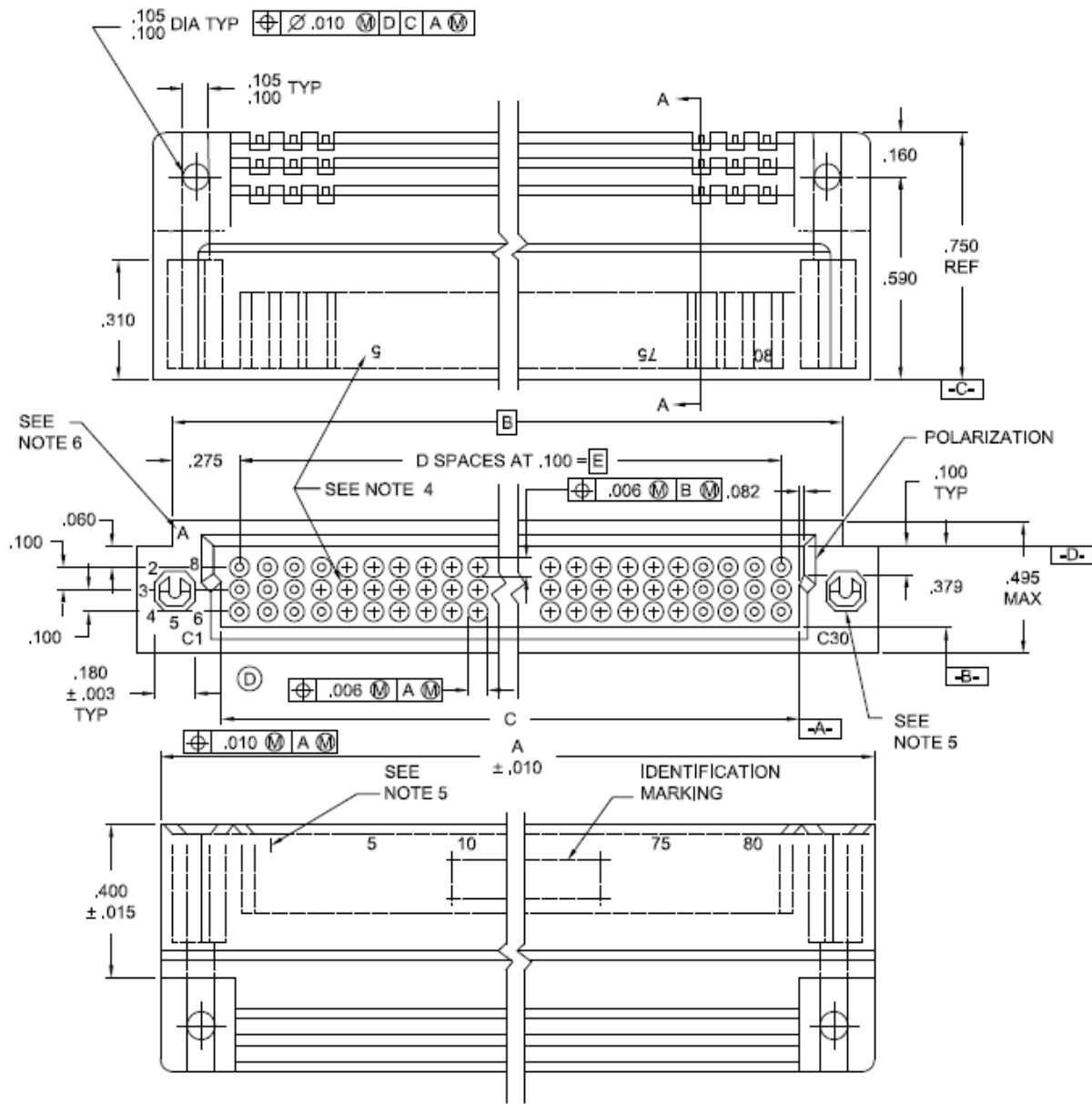
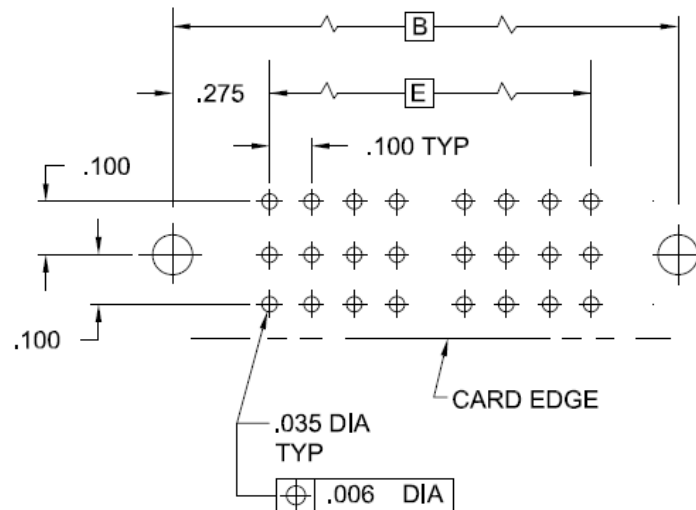
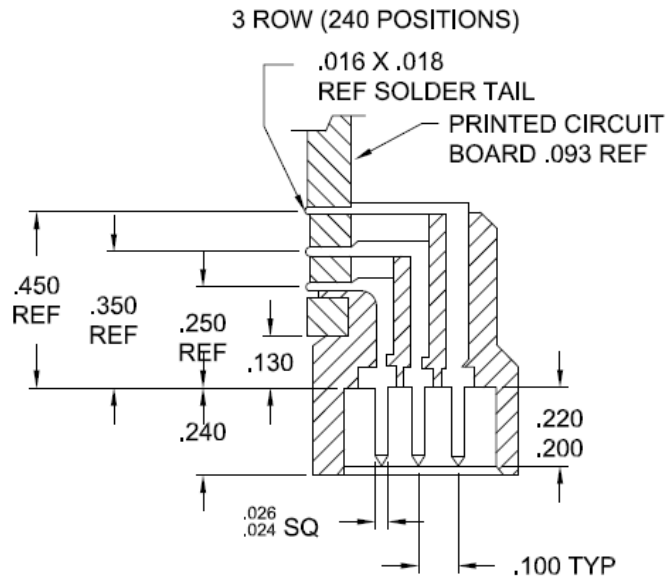


FIGURE 2. Connectors, plug, .100 spacing, 90 and 240 contact positions.



NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerances are $\pm .005$ on three place decimals and $+.2^\circ$ on angles.
3. These connectors mate with connectors specified in MIL-DTL-55302/130.
4. Numbers indicating end cavities marked or molded both sides. Lines indicating every five cavities marked or molded on mating face, except end cavities,
5. Location indicators embossed on surface.
6. Letters indicating rows and numbers indicating end cavities marked or molded this surface.

FIGURE 2. Connectors, plug, type II, .075 (1.91 mm) spacing – Continued.

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TABLE I. Dash numbers, polarization types, and contact types for 160 and 240 contact positions.

Dash number	Number of contacts	Type polarization
01	160	I
02	160	II
03	160	III
04	160	IV
05	240	I
06	240	II
07	240	III
08	240	IV

TABLE II. Dash numbers and dimensions (For 90 through 240 contact positions).

Dash number	Number of contacts	Dimensions <u>1/</u>					Contact identification number
		A	B	C	D	E	
09	90	3.750	3.450	3.044	29	2.900	1-30
10	105	4.250	3.950	3.544	34	3.400	1-35
11	120	4.750	4.450	4.044	39	3.900	1-40
12	135	5.250	4.950	4.544	44	4.400	1-45
13	150	5.750	5.450	5.044	49	4.900	1-50
14	165	6.250	5.950	5.544	54	5.400	1-55
15	180	6.750	6.450	6.044	59	5.900	1-60
16	195	7.250	6.950	6.544	64	6.400	1-65
17	210	7.750	7.450	7.044	69	6.900	1-70
18	240	8.750	8.450	8.044	79	7.900	1-80

REQUIREMENTS

Design and construction:

Dimensions and configuration: See figures 1 and 2 and table II.

Material:

Insulator body: Insulator material shall be in accordance with MIL-DTL-55302 or type GLCP-30F in accordance with ASTM D5138 or MIL-M-24519.

Contact material: Contact material in accordance with MIL-DTL-55302 or Beryllium copper alloy C17400 in accordance with ASTM B768.

Plating: The contact plating for the engagement area, (.150 inch minimum length) shall be gold in accordance with MIL-DTL-55302 over nickel in accordance with MIL-DTL-55302. The contact area between the engagement area and the solder tail shall be nickel accordance MIL-DTL-55302. The contact plating for the solder tail area shall be tin-lead over nickel in accordance with MIL-DTL-55302.

Contact identification: See figures 1 and 2.

Contact rating: 3.0 amperes maximum per contact, 2.25 amperes continuous per contact at 75°F.

Mating and unmating: The maximum mating force in pounds shall be the number of contacts multiplied by .25 and the withdrawal force in pounds shall be a minimum of .025 times the number of contacts and shall not exceed the measured insertion force.

Contact resistance: No individual contact pair shall have a resistance exceeding .020 ohm.

Contact retention: 3 pounds minimum.

Dielectric withstanding voltage:

Sea level: 900 volts rms.

High altitude: 200 volts rms.

Keying: See MIL-DTL-55302/31.

Part or Identifying Number (PIN): M55302/129-(and dash number from table I for 160 and 240 contact positions). M55302/129- (and dash numbers from table II for 90 through 240 contact positions).

Patent number 3,404,367. The Government has a royalty free license under this patent for the benefit of manufacturers of the item either for the Government or for use in equipment to be delivered to the Government.

Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

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Referenced documents. In addition to MIL-DTL-55302, this document references the following:

MIL-DTL-55302/130 ASTM B768
MIL-DTL-55302/31 ASTM D5138
MIL-M-24519

CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5935-2025-069)

Review activities:

Army – AR, AT, AV, CR4, MI
Navy – AS, MC, OS
Air Force - 19

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