

DETAIL C OPTIONAL DESIGNS FOR PRINTED CIRCUIT TAILS

FIGURE 1. Connector, receptacle, .100 (2.54 mm) spacing – Continued.

MIL-DTL-55302/132C

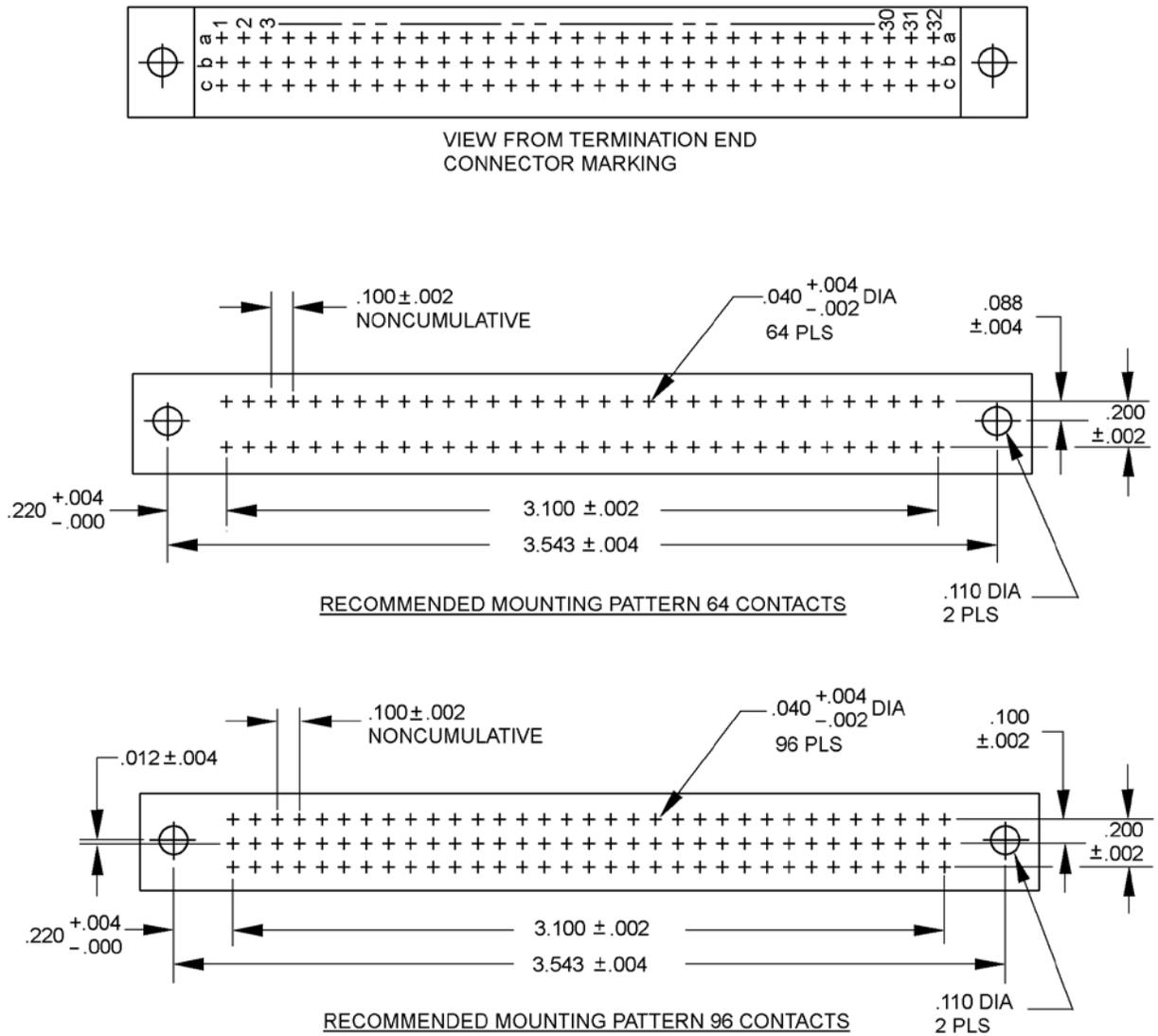


FIGURE 1. Connector, receptacle, .100 (2.54 mm) spacing – Continued.

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Part or Identifying Number (PIN)	Number of contacts	Type of termination	"A" dimension
M55302/132-01	96	Printed circuit tails	.104 ±.020
M55302/132-02	96	Wrappost	.520 ±.020 <u>1/</u>
M55302/132-03	96	Wrappost	.677 ±.020 <u>2/</u>
M55302/132-04	64	Printed circuit tails	.104 ±.020 <u>3/</u>
M55302/132-05	64	Wrappost	.520 ±.020 <u>1/</u> , <u>3/</u>
M55302/132-06	64	Wrappost	.677 ±.020 <u>2/</u> , <u>3/</u>

1/ This dimension is suitable for 2 wraps of 28, 28 or 30 AWG.

2/ This dimension is suitable for 3 wraps of 28, 28 or 30 AWG.

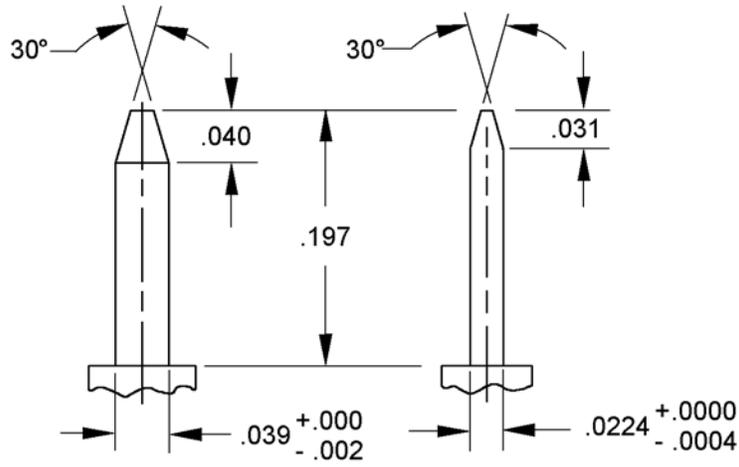
3/ These connectors have the middle row (row 8) of contacts excluded.

Inches	mm	Inches	mm	Inches	mm	Inches	mm
.002	0.05	.024	0.61	.083	2.11	.200	5.08
.004	0.10	.025	0.64	.088	2.24	.220	5.59
.008	0.20	.031	0.79	.091	2.31	.222	5.64
.010	0.25	.035	0.89	.100	2.54	.335	8.51
.012	0.30	.039	0.99	.110	2.79	.412	10.46
.015	0.38	.040	1.02	.114	2.90	.457	11.61
.017	0.43	.047	1.19	.118	3.00	3.100	78.74
.020	0.51	.063	1.60	.156	3.96	3.456	84.99
.022	0.56	.067	1.70	.192	4.88	3.543	89.99
						3.740	95.00

NOTES:

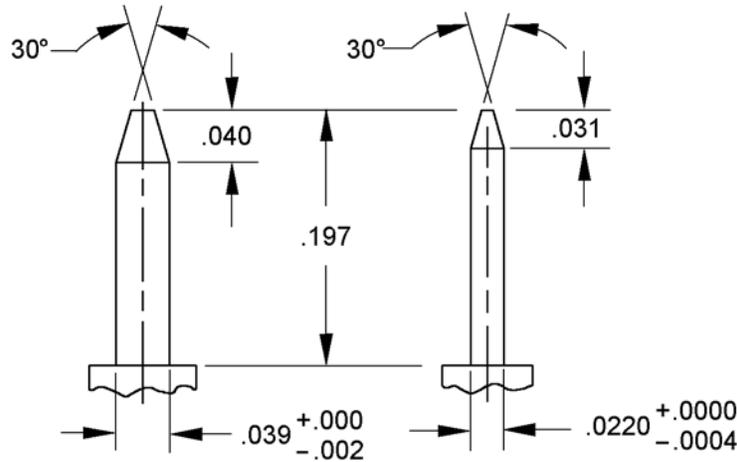
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerance is ± .005 (0.13 mm).
4. These connectors mate with connectors specified in MIL-DTL-55302/131.
5. Wrappost contacts shall be in accordance with MIL-STD-1130.

FIGURE 1. Connector, receptacle, .100 (2.54 mm) spacing – Continued.



TEST PIN A

Inches	mm
.0004	0.010
.002	0.05
.008	0.20
.0220	0.559
.0244	0.620
.031	0.79
.039	0.99
.040	1.02
.197	5.00

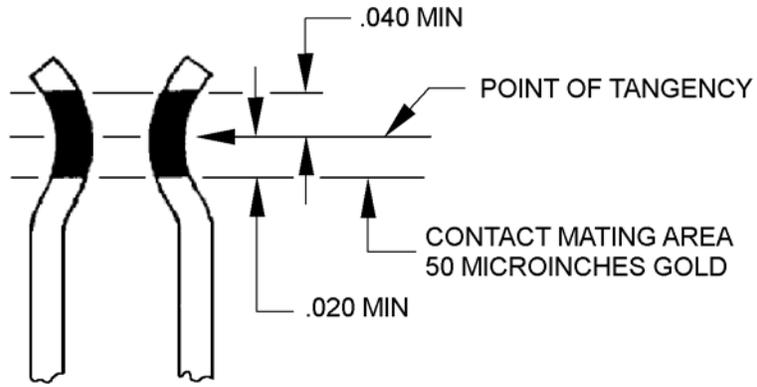


TEST PIN B

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerance is $\pm .008$ (0.20 mm) on decimals and $\pm 2^\circ$ on angles.

FIGURE 2. Test pins.



Inches	mm
.020	.051
.040	1.02

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.

FIGURE 3. Contact plating.

REQUIREMENTS

Design and construction:

Dimensions and configurations: See figure 1.

Materials and finish:

Contact plating: The contact mating area shall be gold in accordance with MIL-DTL-45204, type II, grade C or D, class 1 or equivalent, over nickel plating in accordance with SAE-AMS-QQ-N-290, 30 to 150 microinches. The contact mating area is shown on figure 3

Nonfunctional areas: Any portion of the contact other than the contact mating area or termination area can be plated in accordance with MIL-DTL-55302.

Contact identification: See figure 1.

Body design: the insulator body of each receptacle may be two-piece construction secured by mechanical means.

Contact separation forces: Separation forces shall be 5 ounce minimum, using the following test pins.

1. Insert and withdraw test pin A (see figure 2)
2. Insert test pin B (see figure 2) fully and withdraw test pin B .071 inch and measure the separation force.

Mating and unmating: The maximum mating force, in pounds, shall not exceed a value equal to 0.25 times the number of contacts, and the withdraw force, in pounds, shall be a minimum of 0.025 times the number of contacts and shall not exceed the measured insertion force, when the housing is loaded with contacts and mated with connector specified in MIL-DTL-55302.131.

Contact rating: 3 amperes maximum per contact.

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

Contact retention: 3 pounds minimum per contact.

Dielectric withstanding voltage:

Sea level: 1,000 volts rms, 50 or 60 hertz.

High altitude: 300 volts rms, 50 or 60 hertz.

Oversize pin exclusion: Not applicable.

PIN: See figure 1.

Qualification: Qualification is not required for this specification sheet.

First article testing (FAT): FAT shall be in accordance with MIL-DTL-55302, qualification inspection.

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Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. 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 and relationship to the previous issue.

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

MIL-DTL-55302/131
MIL-DTL-45204
MIL-STD-1130
SAE-AMS-QQ-N-290

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5935-2015-144)

Review activities:

Army – AR, AT, CR4, MI
Navy – AS, MC, OS, SH
Air Force – 19, 99

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