

INCH-POUND

MIL-DTL-83505/1F  
17 May 2004  
SUPERSEDING  
MIL-S-83505/1E  
25 September 1991

DETAIL SPECIFICATION SHEET

SOCKETS (LEAD, ELECTRONIC COMPONENTS) (TYPE I, SOLDERLESS WRAP)

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-83505.

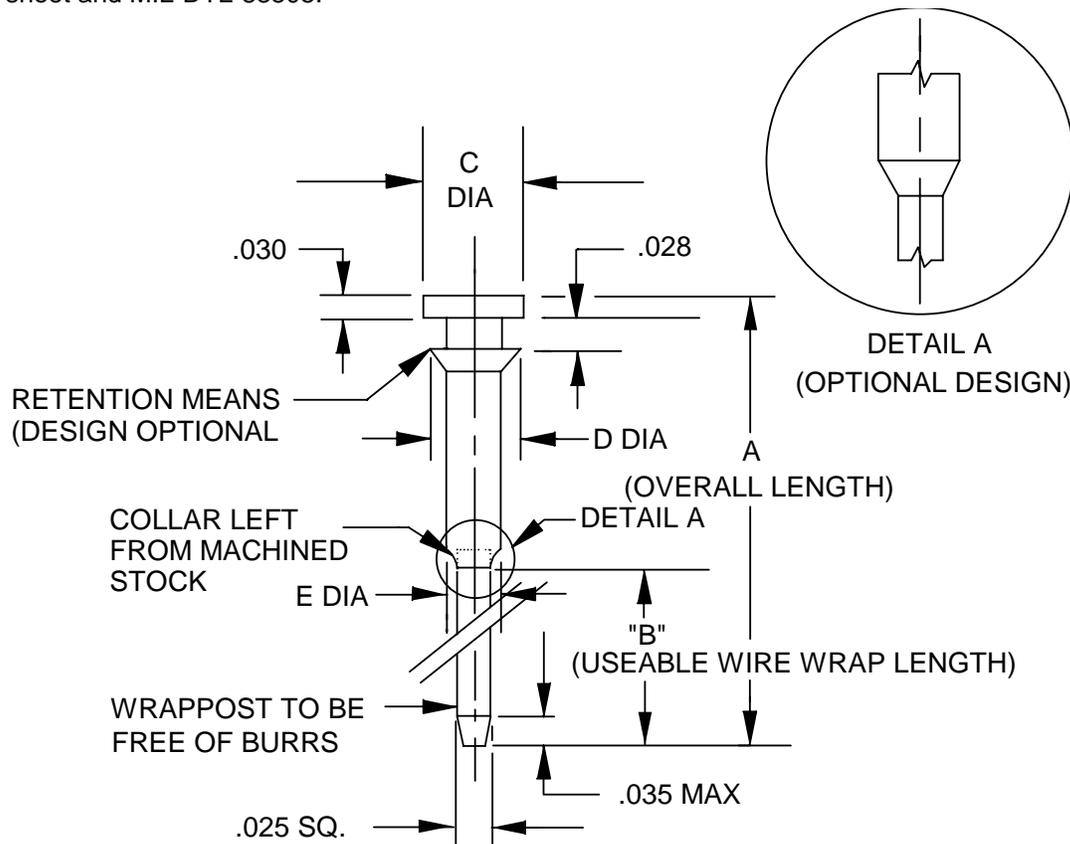


FIGURE 1. Socket, lead, (type I) solderless wrap.

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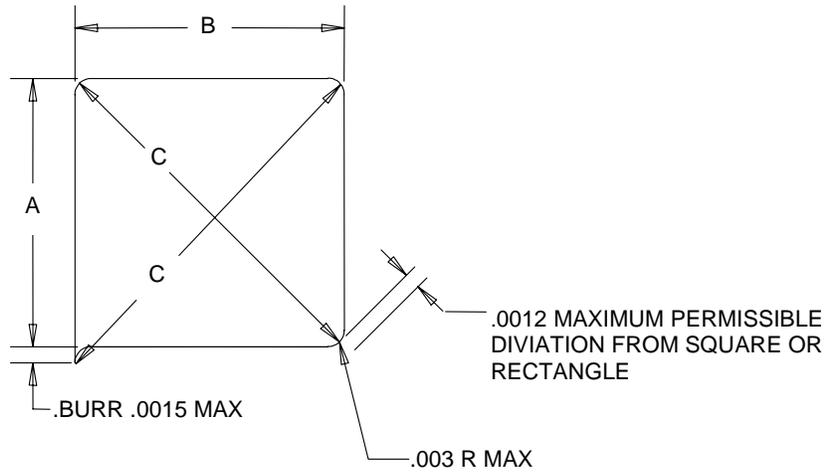
Dash number	A ".010 (0.25)	B ".010 (0.25)	C Dia	D Dia ".002 (0.05)	E Dia
-001 -002	.703 (17.86)	.475 (12.07)	.072 (1.83)	.060 (1.52)	.052 (1.32)
-003 -004	.563 (14.30)	.335 (8.51)	.072 (1.83)	.060 (1.52)	.052 (1.32)
-005 -006	.453 (11.51)	.225 (5.71)	.072 (1.83)	.060 (1.52)	.052 (1.32)
-007 -008	.812 (20.62)	.475 (12.07)	.085 (2.16)	.082 (2.08)	.073 (1.85)
-009 -010	.703 (17.86)	.475 (12.07)	.063 ±.003 (1.60 "0.08)	.060 (1.52)	.052 (1.32)
-011 -012	.563 (14.30)	.335 (8.51)	.063 ±.003 (1.60 "0.08)	.060 (1.52)	.052 (1.32)
-013 -014	.453 (11.51)	.225 (5.71)	.063 ±.003 (1.60 "0.08)	.060 (1.52)	.052 (1.32)

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified the tolerance for three place decimals is ± .005 inch (0.13 mm).
4. Part is to be free of burrs, except as noted.
5. Dimensions apply after plating.

FIGURE 1. Socket, lead, (type I) solderless wrap - Continued.

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Inches	mm
.0012	0.030
.0015	0.038
.003	0.076

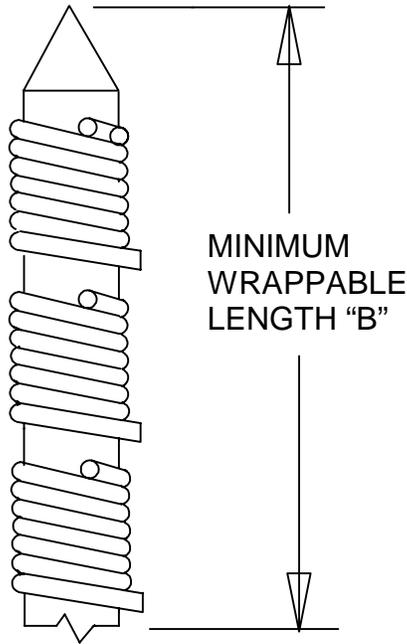
A (mm)	B (mm)	C (mm)	Parallelism (mm)	Straightness Inch/inch (mm)
.025 (0.63) nominal	.025 (0.63) nominal	.0355 (0.902) max	.002	.005
.022 (0.56) min	.022 (0.56) min	.0325 (0.825) min	(0.05)	(0.13)

NOTES:

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

FIGURE 2. Wrappost geometry.

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MINIMUM WRAPPABLE LENGTH, -B, INCHES

(see note 5)

Number of wrapped connections	Wire gauge (AWG)						
	30	28	26	24	22	20	18
1	.185 (4.70)	.219 (5.56)	.226 (5.74)	.258 (6.55)	.303 (7.70)	.327 (8.31)	.391 (9.93)
2	.320 (8.13)	.388 (9.86)	.402 (10.21)	.466 (11.84)			
3	.455 (11.56)						

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Metric equivalents are in parentheses.
4. Unless otherwise specified the tolerance is  $\pm .005$  inch (0.13 mm).
5. Minimum wrappable length shall have the wrappost geometry in accordance with figure 2.

FIGURE 3. Wrappost configurations and wire gauge wrappable length.

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REQUIREMENTS

Qualification:

Group qualification: Shall be as specified in table I.

Dimensions and configuration: Shall be in accordance with figures 1, 2, and table II.

Solderless wrappost geometry: The solderless wrappost geometry shall be in accordance with figures 2 and 3.

TABLE I. Group qualification.

Dash number	Qualification tests
-001, -002, -009, and -010 (as applicable)	Require all qualification tests of MIL-DTL-83505.
-003 through -006 and -011 through -014 (as applicable)	Visual and mechanical tests of MIL-DTL-83505 and qualification of one of the following: -001, -002, -009, -010
-007 and -008 (as applicable)	Groups 1, 2, and 5 of qualification table of MIL-DTL-83505 and qualification of one of the following: -001, -002, -009, or -010.

TABLE II. Interface dimensions and finish.

Dash number	Recommended mounting hole dia (mm) ".001 (0.03)	Accepts pin		Sleeve plating
		Length (mm)	Diameter (mm)	
-001 and -009	.055 (1.40)	.175 (4.44)	.021 (0.53)	Gold
-002 and -010		.125 (3.18)	.016 (0.41)	Tin/lead
-003 and -011	.055 (1.40)	.175 (4.44)	.021 (0.53)	Gold
-004 and -012		.125 (3.18)	.016 (0.41)	Tin/lead
-005 and -013	.055 (1.40)	.175 (4.44)	.021 (0.53)	Gold
-006 and -014		.125 (3.18)	.016 (0.41)	Tin/lead
-007	.076 (1.93)	.281 (7.14)	.030 (0.76)	Gold
-008		.156 (3.96)	.020 (0.51)	Tin/lead



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CONCLUDING MATERIAL

Custodians:

Navy - EC  
Army - CR  
Air Force - 11  
DLA - CC

Preparing activity:

DLA - CC

(Project 5935-4510-001)

Review activities:

Air Force - 99

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 <http://www.dodssp.daps.mil/>.