

INCH - POUND

MIL-STD-1837B

4 NOVEMBER 1991

SUPERSEDING

MIL-STD-1837A

3 NOVEMBER 1989

MILITARY STANDARD

MISCELLANEOUS ELECTRICAL AND ELECTRONIC COMPONENTS, SELECTION GUIDE



AMSC N/A

DISTRIBUTION STATEMENT A.

FSC 5999

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MIL-STD-1837B

FOREWORD

1 This military standard is approved for use by all Departments and Agencies of the Department of Defense

2. Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Electronic Support Division (AFLC) 2750 LOG/ES, Gentile Air Force Station, Dayton, OH 45444-5400, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

3. This standard provides a listing of miscellaneous electrical and electronic components available for use in the design of military equipment. The application information and performance characteristics presented are offered for guidance only and are not to be considered as binding. Additions to this standard will be made periodically as the referenced documents are updated

MIL-STD-1837B

CONTENTS

PARAGRAPH		PAGE
1.	SCOPE - - - - -	1
1.1	Scope - - - - -	1
1.2	Purpose - - - - -	1
2	APPLICABLE DOCUMENTS- - - - -	2
2.1	Government documents- - - - -	2
2.1.1	Specifications, standards, and handbooks- - - - -	2
2.1.2	Other Government documents, drawings, and publications- - - - -	2
2.2	Order of precedence - - - - -	3
3.	DEFINITIONS - - - - -	4
3.1	Definition of item names (H-6)- - - - -	4
3.2	Definition of item names (H2-2) - - - - -	4
3.3	Definitions - - - - -	4
3.3.1	DESC drawing- - - - -	4
3.3.2	Part or Identifying Number (PIN)- - - - -	4
3.3.3	Qualified Products List (GPL) - - - - -	4
4.	GENERAL REQUIREMENTS- - - - -	5
4.1	Item identification - - - - -	5
4.2	Conflict of requirements- - - - -	5
4.3	Criteria for inclusion in this standard- - - - -	5
4.4	Order of preference - - - - -	5
4.5	Qualified Products List (GPL) - - - - -	5
4.6	Drawing notes - - - - -	5
5	DETAILED REQUIREMENTS - - - - -	6
5.1	Detailed requirements - - - - -	6
6	NOTES - - - - -	7
6.1	Recycled, virgin and reclaimed materials - - - - -	7
6.2	Dimensions and tolerances - - - - -	7
6.3	Part or Identifying Number (PIN)- - - - -	7
6.4	Subject term (key word) listing - - - - -	7
6.5	Changes from previous issue - - - - -	7
SECTION		
Section 100	Mounting pads- - - - -	100.1
Section 200	EMI/RFI gaskets and shielding tape - - - - -	200.1
Section 300	Delay lines, active- - - - -	300.1
Section 400	Delay lines, passive - - - - -	400.1
Section 500	Heat sinks - - - - -	500.1

MIL-STD-1837B

CONTENTS

FIGURE		PAGE
200.1	MIL-G-83528/1 (solid circular strips) - - -	200.3
200.2	MIL-G-83528/2 and MIL-G-83528/5 (O-rings) -	200.4
200.3	MIL-G-83528/3 (solid O-strips)- - - - -	200.6
200.4	MIL-G-83528/4 (connector flange)- - - - -	200.7
200.5	MIL-G-83528/6 (rectangular, D-cross section)- - - - -	200.10
200.6	MIL-G-83528/7 (hollow O-strips) - - - - -	200.11
200.7	MIL-G-83528/8 (hollow P-strips) - - - - -	200.12
200.8	MIL-G-83528/9 (solid rectangular strips) - - -	200.13
200.9	MIL-G-83528/10 (channel strips)- - - - -	200.14
200.10	MIL-G-83528/11 (hollow O-strips) - - - - -	200.15
200.11	MIL-G-83528/12 (flat circular washers) - - -	200.16
200.12	MIL-G-83528/13 (waveguide) - - - - -	200.17
200.13	DESC drawing 86129 (solid circular strips, wire mesh) - - - - -	200.25
200.14	DESC drawing 86128 (rectangular D-type connector) - - - - -	200.26
200.15	DESC drawing 90046 (oriented wires in elastomer strips) - - - - -	200.27
200.16	DESC drawing 90095 (shielding tape, knitted wire mesh) - - - - -	200.28
300.1	Delay lines, active, package configurations- -	300.2
400.1	Delay lines, passive, package configurations -	400.1
500.1	Heat sinks, fin stock, aluminum alloy, straight fin with flat crest - - - - -	500.22
500.2	Heat sinks, fin stock, aluminum alloy, straight fin with rounded crest- - - - -	500.23
500.3	Heat sinks, fin stock, aluminum alloy, lanced offset with flat crest- - - - -	500.24
500.4	Heat sinks, fin stock, aluminum alloy, lanced offset with curved fin- - - - -	500.27
TABLE		
100.I	One hole circular mounting pads- - - - -	100.2
100.II	Two hole circular mounting pads- - - - -	100.2
100.III	Three hole circular mounting pads- - - - -	100.2
100.IV	Four hole circular mounting pads - - - - -	100.3
100.V	Five hole circular mounting pads - - - - -	100.3
100.VI	Six hole circular mounting pads- - - - -	100.4
100.VII	Eight hole circular mounting pads- - - - -	100.4
100.VIII	Ten hole circular mounting pads- - - - -	100.5
100.IX	Eleven hole circular mounting pads - - - - -	100.5
100.X	Twelve hole circular mounting pads - - - - -	100.5
100.XI	Fourteen hole circular mounting pads - - - - -	100.5
100.XII	One hole miscellaneous mounting pads - - - - -	100.6
100.XIII	Two hole miscellaneous mounting pads - - - - -	100.6
100.XIV	Four hole miscellaneous mounting pads- - - - -	100.6
100.XV	Eight hole miscellaneous mounting pads - - - - -	100.6
100.XVI	Ten hole miscellaneous mounting pads - - - - -	100.7
100.XVII	Eleven hole miscellaneous mounting pads- - - - -	100.7
100.XVIII	Three hole rectangular mounting pads - - - - -	100.7
100.XIX	Eight hole rectangular mounting pads - - - - -	100.7
100.XX	Ten hole rectangular mounting pads - - - - -	100.7
100.XXI	Fourteen hole rectangular mounting pads- - - - -	100.7
100.XXII	Sixteen hole rectangular mounting pads - - - - -	100.8
100.XXIII	Vertical mounting pads - - - - -	100.8

MIL-STD-1837B

CONTENTS

TABLE		PAGE
300.I	One tap, 14-pin DIP, .360 inch profile - - -	300.3
300.II	Two taps, 14-pin DIP, .360 inch profile - - -	300.3
300.III	Five taps, 14-pin DIP, .186 inch profile - - -	300.4
300.IV	Five taps, 14-pin DIP, .250 to .260 inch profile - - - - -	300.5
300.V	Five taps, 14-pin DIP, .360 inch profile - - -	300.6
300.VI	Ten taps, 14-pin DIP, .315 inch profile - - -	300.7
300.VII	Ten taps, 14-pin DIP, .185 to .360 inch profile - - - - -	300.7
300.VIII	Two delay circuits per package, 14-pin DIP, .186 inch profile - - - - -	300.8
300.IX	Three delay circuits per package, 14-pin DIP, .250 to .260 inch profile - - - - -	300.9
300.X	Three delay circuits per package, 14-pin DIP, .360 inch profile - - - - -	300.11
300.XI	Three delay circuits per package, 14-pin DIP, .360 inch profile, low-power Schottky- - - -	300.12
300.XII	Programmable, 16-pin DIP, .377 inch profile- -	300.13
300.XIII	Programmable, 24-pin surface mount, .300 inch profile, ECL - - - - -	300.14
400.I	Ten taps, 14-pin DIP, 50 ohms impedance- - -	400.2
400.II	Ten taps, 14-pin DIP, 100 ohms impedance - - -	400.3
400.III	Ten taps, 14-pin DIP, 200 ohms impedance - - -	400.5
400.IV	Ten taps, 14-pin DIP, 360 ohms impedance - - -	400.6
400.V	Ten taps, 14-pin DIP, 500 ohms impedance - - -	400.7
400.VI	Ten taps, 16-pin DIP, 50 ohms impedance- - -	400.7
400.VII	Ten taps, 16-pin DIP, 100 ohms impedance - - -	400.8
400.VIII	Ten taps, 16-pin DIP, 200 ohms impedance - - -	400.8
400.IX	Ten taps, 16-pin DIP, 250 ohms impedance - - -	400.9
400.X	Ten taps, 16-pin DIP, 300 ohms impedance - - -	400.9
400.XI	Ten taps, 16-pin DIP, 400 ohms impedance - - -	400.10
400.XII	Ten taps, 16-pin DIP, 500 ohms impedance - - -	400.10
400.XIII	Twenty taps, 24-pin DIP, 50 ohms impedance - -	400.11
400.XIV	Twenty taps, 24-pin DIP, 100 ohms impedance- -	400.11
400.XV	Twenty taps, 24-pin DIP, 200 ohms impedance- -	400.12
400.XVI	Twenty taps, 24-pin DIP, 250 ohms impedance- -	400.12
400.XVII	Twenty taps, 24-pin DIP, 500 ohms impedance- -	400.13
400.XVIII	Three-pin SIP- - - - -	400.14
500.I	Heat sinks, TO-3 - - - - -	500.2
500.II	Heat sinks, TO-5 - - - - -	500.6
500.III	Heat sinks, TO-6 - - - - -	500.7
500.IV	Heat sinks, TO-7 - - - - -	500.7
500.V	Heat sinks, TO-8 - - - - -	500.8
500.VI	Heat sinks, TO-9 - - - - -	500.8
500.VII	Heat sinks, TO-11- - - - -	500.9
500.VIII	Heat sinks, TO-18- - - - -	500.9
500.IX	Heat sinks, TO-36- - - - -	500.10
500.X	Heat sinks, TO-38- - - - -	500.10
500.XI	Heat sinks, TO-42- - - - -	500.11
500.XII	Heat sinks, TO-53- - - - -	500.11
500.XIII	Heat sinks, TO-58- - - - -	500.11
500.XIV	Heat sinks, TO-66- - - - -	500.12
500.XV	Heat sinks, TO-92- - - - -	500.14
500.XVI	Heat sinks, TO-99- - - - -	500.15
500.XVII	Heat sinks, TO-126 - - - - -	500.15
500.XVIII	Heat sinks, TO-220 - - - - -	500.16
500.XIX	Heat sinks, stud - - - - -	500.18
500.XX	Heat sinks, DIP- - - - -	500.20
500.XXI	Heat sinks, Misc.- - - - -	500.21

MIL-STD-1837B

1. SCOPE

1.1 Scope. This standard covers the following military electronic parts in Federal Stock Class (FSC) 5999.

- a. Mounting pads.
- b. EMI/RFI gaskets.
- c. Delay lines, active
- d. Delay lines, passive.
- e. Heat sinks.

1.2 Purpose. The purpose of this standard is to:

- a. Provide designers of new equipment with basic descriptions of standard military parts for selection purposes.
- b. Control and minimize the number of items used in military equipment in order to facilitate logistic support.

MIL-STD-18378

2. APPLICABLE DOCUMENTS

2.1 Government documents

2.1.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation.

SPECIFICATIONS

MILITARY

- | | | |
|-------------|---|--|
| MIL-F-3922 | - | Flange, Waveguide, General Purpose. |
| MIL-M-38527 | - | Mounting Pads, Electrical-Electronic Component, General Specification for. |
| MIL-G-83528 | - | Gaskets, Shielding, Elastomer, Electrical, EMI/RFI, General Specification for. |
| MIL-D-83531 | - | Delay Lines, Passive, General Specification for. |
| MIL-D-83532 | - | Delay Lines, Active, General Specification for. |
| MIL-H-87111 | - | Heat Sinks, Semiconductor Devices, General Specification for |

HANDBOOKS

FEDERAL

- | | | |
|------|---|----------------------------|
| H-6 | - | Alphabetic Index of Names. |
| H2-2 | - | Cataloging Handbook. |

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.1.2 Other Government documents, drawings, and publications The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation

DESC Drawings

- | | | |
|---------|---|---|
| 84035 | - | Delay Lines, 10-Tap, Dual-In-Line, 16-PIN. |
| * 84087 | - | Delay Lines, 1 to 5 Taps, 14 PIN DIP Compatible, T ² L Interfaced |
| 85008 | - | Delay Lines, 5 Taps, 14 PIN DIP, TTL Interfaced |
| 85009 | - | Delay Lines, Two Delay Lines, 14 PIN DIP, TTL Interfaced. |
| 85012 | - | Delay Lines, 20-Tap, Dual-in-Line, 24 PIN. |
| 85013 | - | Delay Lines, 5 Taps, 14 PIN DIP Compatible, TTL Interfaced |
| 85014 | - | Delay Lines, 10 Taps, 14 PIN DIP, TTL Interfaced |
| 85019 | - | Delay Lines, Programmable 16 PIN Compatible, 3 BIT, TTL Compatible |
| 85078 | - | Delay Lines, Programmable 3 Bit, 16 PIN DIP Compatible, Emitter-Coupled Logic |
| 85136 | - | Heat Sinks, Electrical-Electronic Component, Fin Stock. |

MIL-STD-1837B

- * 85141 - Delay Lines, Three Delay Lines, 14-PIN DIP Compatible, TTL Compatible.
- 85151 - Delay Line, Three Delay Lines, 14 PIN DIP Compatible, TTL Compatible
- 86128 - Shielding Gasket, Electronic, RFI, D-Type Connector.
- 86129 - Gaskets, Shielding, EMI/RFI, Wire Mesh, Resilient, Strips With Round Cross Section.
- 87035 - Delay Line, Three Delay Lines, 14 PIN DIP, Low Power Schottky
- 88013 - Delay Lines, Passive, 3 PIN, SIP
- 88023 - Delay Lines, Programmable 24 PIN Compatible, 4 Bit, ECL Interfaced

* Asterisk indicates inactive for new design.

(Copies of DESC drawings are available from the Defense Electronics Supply Center, (ATTN: EA), 1507 Wilmington Pike, Dayton, OH 45444-5000.)

2.2 Order of precedence In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

MIL-STD-1837B

3. DEFINITIONS

3.1 Definition of item names (H-6). Definitions of item names are contained in the Federal Item Name Directory for Supply Cataloging H-6, section A.

3.2 Definition of item names (H2-2). A complete list of item names in FSC 5999 can be found in Cataloging Handbook H2-2

3.3 Definitions. The meanings of terms used in this standard are in accordance with military specifications and DESC drawings

3.3.1 DESC drawing. A standardization document developed by and available from the Defense Electronics Supply Center.

3.3.2 Part or Identifying Number (PIN). Formerly part number (P/N).

3.3.3 Qualified Products List (QPL). A document maintained by DESC-EQP which lists vendors whose products are officially approved by DESC

MIL-STD-1837B

4. GENERAL REQUIREMENTS

4.1 Item identification Military Part or Identifying Number (PIN) is used to identify the items listed in this standard. Abbreviated PIN is used in some cases for convenience. See the appropriate specification or drawing for complete PIN.

4.2 Conflict of requirements. In the event of conflict between the technical requirements of items described in this standard and the applicable specification or DESC drawing, the specification or DESC drawing shall govern.

4.3 Criteria for inclusion in this standard. All parts referenced in this standard are:

- a. Classified in FSC 5999.
- b. The best type available for general use in military equipment.
- c. Covered by military specifications or DESC drawings.
- d. Available from at least one source.
- e. To be used for design purposes in new equipment.

4.4 Order of preference The order of preference, for parts selection, shall be as follows:

- a. Military specification parts
- b. DESC drawing parts

4.5 Qualified Products List (QPL). Most EMI gaskets and some delay lines described herein are listed on QPL's. Parts covered by QPL's shall be used whenever available.

4.6 Drawing notes

- a. Dimensions are in inches
- b. Metric equivalents are given for general information only
- c. Metric equivalents are in parentheses

MIL-STD-1837B

5. DETAILED REQUIREMENTS

5.1 Detailed requirements. The detailed requirements for the parts covered herein are contained in the referenced specifications or drawings.

MIL-STD-1837B

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Recycled, virgin, and reclaimed materials. The use of reclaimed materials shall be encouraged to the maximum extent possible

6.2 Dimensions and tolerances. Unless otherwise indicated, all dimensions are given in inches. Tolerances may be found in the referenced specifications and drawings if not called out herein.

6.3 Part or Identifying Number (PIN). PIN's beginning with the letter "M" are military specification part numbers. All other PIN's are DESC drawing part numbers

6.4 Subject term (key word) listing.

Delay lines

EMI gaskets

Heat sinks

Mounting pads

6.5 Changes from previous issue Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes

MIL-STD-1837B

CONCLUDING MATERIAL

Custodians

Army - ER

Navy - EC

Air Force - 85

Review activities

Army - ME, MI

Air Force - 99

DLA - ES

Preparing activity:
Air Force - 85

Agent:
DLA - ES

(Project 5999-0278)

MIL-STD-1837B

SECTION 100

MOUNTING PADS (MIL-M-38527)

General design	Page	Table
One hole circular	100.2	100 I
Two hole circular	100.2	100.II
Three hole circular	100.2	100.III
Four hole circular	100.3	100.IV
Five hole circular	100.3	100.V
Six hole circular	100.4	100.VI
Eight hole circular	100.4	100.VII
Ten hole circular	100.5	100.VIII
Eleven hole circular	100.5	100.IX
Twelve hole circular	100.5	100.X
Fourteen hole circular	100.5	100.XI
One hole miscellaneous	100.6	100.XII
Two hole miscellaneous	100.6	100.XIII
Four hole miscellaneous	100.6	100.XIV
Eight hole miscellaneous	100.6	100.XV
Ten hole miscellaneous	100.7	100.XVI
Eleven hole miscellaneous	100.7	100.XVII
Three hole rectangular	100.7	100.XVIII
Eight hole rectangular	100.7	100.XIX
Ten hole rectangular	100.7	100.XX
Fourteen hole rectangular	100.7	100.XXI
Sixteen hole rectangular	100.8	100.XXII
Vertical	100.8	100.XXIII

MOUNTING PAD MATERIALS

Specification sheet MIL-M-38527/	Available materials	Specification sheet MIL-M-38527/	Available materials
1	D,N	7	D,N
2	D,N	8	G,P,R
3	D,N	9	T,S
4	D,N	10	D,N
5	D,N,S	11	C
6	D,N		

C - Thermoplastic polyester
 D - Diallyl phthalate
 G - Polyimide reinforced with glass cloth
 N - Nylon
 P - Polyimide
 R - Silicone rubber reinforced with glass cloth
 S - Polyphenylene sulfide
 T - Polytetrafluoroethylene

MIL-STD-1837B

TABLE 100.I. One-hole circular mounting pads

Pad diameter (inches)	Through hole diameter (inches)	PIN M38527/
.085	.028	06-029
.085	.032	06-030
.125	.032	06-031
.125	.047	06-032
.130	.045	01-045
.148	.085	06-033
.156	.047	06-034
.167	.105	06-035
.187	.063	06-036
.187	.091	06-037
.187	.120	06-038
.250	.091	06-039
.250	.115	06-040
.250	.147	06-041
.250	.171	06-042
.365	.250	02-009
.365	.250	02-041

TABLE 100.II Two-hole circular mounting pads

Pad diameter (inches)	Through hole diameter (inches)	Pin center diameter (inches)	PIN M38527/
.305	.033	.200 conv	10-006

TABLE 100.III Three-hole circular mounting pads

Pad diameter (inches)	Through hole diameter (inches)	Pin center diameter (inches)	PIN M38527/
.260	N/A	.100 to .200 conv	03-013
.280	.022	.200	10-002
.281	.045	.200	02-047
.281	.045	.200	02-036
.281	.045	.200	02-015
.300	.030	.100	01-048
.300	N/A	.200 conv	03-006
.343	.044	"	03-007
.343 (plus .031R tab)	.045	"	02-017
.344 (plus .031R tab)	.045	"	02-016
.344	.045	"	02-025
.350	.045	"	02-019
.350	.045	"	02-014
.365 (plus .040R tab)	.028	"	02-044
.375	.062	"	02-037
.375	.029	.200	01-041
.600	.044	.282	07-003

MIL-STD-1837B

TABLE 100 IV Four-hole circular mounting pads

Pad diameter (inches)	Through hole diameter (inches)	Pin center diameter (inches)	PIN M38527/
.190	.030	.100	01-033
.190	.030	"	01-044
.200	.027	"	01-030
.200	.025	"	01-031
.200	.028	"	01-035
.200	.025	"	01-037
.200	.036	"	01-040
.203	.025	"	01-032
.225	.025	.150 conv.	03-016
.225	.026	.150 conv.	03-002
.225	.020	.100	01-039
.225	.028	"	01-042
.225	.028	"	01-043
.225	.028	"	01-046
.228 (plus .038L tab)	.040	.150 conv.	03-009
.230	.025	.150 conv.	03-014
.230 (ref)	.044	100 to .200 conv.	03-004
.230	.044	.100 to .150 or .200 conv.	03-005
.240	.028	.100	01-036
.250	.028	"	01-034
.250	.028	"	01-038
.250	.025	.200 conv.	03-015
.255	.033	.200 conv.	03-001
.270	.025	.100	01-049
.275	.025	.200 conv.	03-008
.305 (plus .027R tab)	.033	" conv.	03-003
.305 (plus .027R tab)	.033	" conv.	03-010
.305	.033	"	03-012
.340	.020	"	02-010
.340	N/A	.220	03-017
.344 (plus .031R tab)	.045	.200	02-021
.350	.036	"	02-018
.350	.028	"	02-023
.350 (plus .030R tab)	.026	"	02-022
.350	.028	"	02-045
.350 (plus .027R tab)	.033	.200 conv.	03-011
.350	.030	.210	02-013
.350 (plus .031R tab)	.020	.192 conv.	10-001
.355	.045	.200	02-020
.355	.046	"	02-039
.400	.020	"	02-011
.500	.040	N/A	10-004

TABLE 100.V. Five-hole circular mounting pads.

Pad diameter (inches)	Through hole diameter (inches)	Pin center diameter (inches)	PIN M38527/
.230	.025	.100	07-002
.343 (plus .030R tab)	.028	.200	02-024
.343 (plus .030R tab)	.039	.200	02-027
.350	.028	.200/.100 conv.	10-005
.375	.028	.200	02-040

MIL-STD-1837B

TABLE 100.VI. Six-hole circular mounting pads.

Pad diameter (inches)	Through hole diameter (inches)	Pin center diameter (inches)	PIN M38527/
.305 (plus .027R tab)	.033	.200 conv	03-012
.340	.028	.200	02-026
.365	.032	N/A conv.	05-010
.365	.025	.200	02-028
.370	.025	.200	02-046
.375	.035	.300 conv	04-010
.500	.030	.390 conv.	04-019

TABLE 100.VII. Eight-hole circular mounting pads

Pad diameter (inches)	Through hole diameter (inches)	Pin center diameter (inches)	PIN M38527/
.340	.025	100/.200	01-047
.355	.045	.200	02-003
.355	.045	.200	02-005
.365	.028	.200	02-043
.365	.025	N/A conv	05-002
.365	.024	.200	02-004
.375	.040	.300 conv	04-011
.375	.036	.200	02-031
.375	.030	.200	02-032
.375	.036	.230	02-033
.375	.036	.200	02-001
.375	.036	.200	02-002
.380	.025	.260 conv	04-006
.380	.025	.280 conv	04-014
.430	.025	.350 conv.	04-003
.500	.025	.400 conv	04-001
.500	.032	.400 conv	04-002
.500	.030	.400 conv	04-012
.500	.025	.280/.400 conv	05-011
.500	.030	100/.200	10-003

MIL-STD-1837B

TABLE 100.VIII Ten-hole circular mounting pads.

Pad diameter (inches)	Through hole diameter (inches)	Pin center diameter (inches)	PIN M38527/
.350	.025	.230	02-034
.375	.036	.200	02-030
.375	.035	.230	02-006
.375	.028	.200	02-007
.375	.036	.230	02-008
.380	.025	.200	02-042
.380	.025	.280 conv.	04-009
.420	.030	.281	06-016
.420	.025	.330 conv.	04-015
.446	.036	.230	02-029
.450	.025	N/A conv.	05-009
.500	.025	.400 conv.	04-004
.500	.025	.400 conv.	04-005
.500	.022	.400 conv.	04-007
.500	.040	.400 conv.	04-013
.500	.040	.400 conv.	04-017

TABLE 100.IX. Eleven-hole circular mounting pads.

Pad diameter (inches)	Through hole diameter (inches)	Pin center diameter (inches)	PIN M38527/
.500	.022	.400 conv.	04-008
.500	.025	.350 conv.	04-016

TABLE 100.X. Twelve-hole circular mounting pads.

Pad diameter (inches)	Through hole diameter (inches)	Pin center diameter (inches)	PIN M38527/
.375	.036	.230	02-035
.545	.022	N/A	07-004
.580	.025	N/A	07-005
.600	.040	.500 conv.	04-018

TABLE 100.XI. Fourteen-hole circular mounting pads.

Pad diameter (inches)	Through hole diameter (inches)	Pin center diameter (inches)	PIN M38527/
.290 (plus .031R tab)	.025/.028	.100/.200	07-001

MIL-STD-1837B

TABLE 100.XII. One-hole miscellaneous mounting pads

Gross size (inches)	Through hole diameter (inches)	PIN M38527/
250 x .375	.062 x .203+R	07-007

TABLE 100.XIII. Two-hole miscellaneous mounting pads

Gross size (inches)	Through hole diameter (inches)	PIN M38527/
.090 x .180	.045	06-008
.090 x .290	.045	06-010
.090 x .290	.045	06-043
.090 x .290	.045 conv	06-046
.090 x .340	.045	06-017
.090 x .390	.045	06-018
.090 x .440	.045	06-019
.090 x .490	.045	06-020
.090 x .590	.045	06-021
100 x 300	.035	06-023
100 x 350	.035	06-024
100 x 400	.035	06-025
100 x .450	.035	06-026
100 x 500	.035	06-027
100 x .600	.035	06-028
.125 x .270	.045	06-009
1 585 x 545	.140	07-006

TABLE 100.XIV. Four-hole miscellaneous mounting pads

Gross size (inches)	Through hole diameter (inches)	PIN M38527/
.220 x .220	N/A	06-011
.270 x .270	.015	06-002
.330 diameter	.024	02-038
.330 dia (mod)	.030	06-015
.350 dia (mod)	.025	06-014
.330 diameter	.030	06-012
.450 x .450	.040 conv.	05-006
.330 x .578	.030	06-022

TABLE 100.XV. Eight-hole miscellaneous mounting pads

Gross size (inches)	Through hole diameter (inches)	PIN M38527/
.34 diameter	.125	06-013
.35 diameter	.030	06-012
.365 x .365	.025 conv.	05-008
.390 x .390	.024 conv	05-012

MIL-STD-1837B

TABLE 100.XVI. Ten-hole miscellaneous mounting pads.

Gross size (inches)	Through hole diameter (inches)	PIN M38527/
.360 x .360	.025 conv.	05-013
.365 x .390	.022	02-012
.370 x .370	.025 conv.	05-001
.370 x .370	.025 conv.	05-003
.395 x .395	.025 conv.	05-007
.390 x .390	.028 conv.	05-014
.340 dia (rod)	N/A	06-013

TABLE 100 XVII. Eleven-hole miscellaneous mounting pads

Gross size (inches)	Through hole diameter (inches)	PIN M38527/
.370 x .370	.025 conv.	05-004

TABLE 100.XVIII. Three-hole rectangular mounting pads

Gross size (inches)	Through hole diameter (inches)	PIN M38527/
.200 x .400	.050	06-045

TABLE 100.XIX. Eight-hole rectangular mounting pads.

Gross size (inches)	Through hole diameter (inches)	PIN M38527/
.225 x .495	.035	06-044
.300 x .600	.035	06-003
.400 x .800	.035	06-001

TABLE 100.XX Ten-hole rectangular mounting pads.

Gross size (inches)	Through hole diameter (inches)	PIN M38527/
.385 x .490	.025 conv.	05-005

TABLE 100.XXI. Fourteen-hole rectangular mounting pads.

Gross size (inches)	Through hole diameter (inches)	PIN M38527/
.450 x .750	.035	06-004
.450 x .750	.035	06-005
.450 x .750	.035	06-006

MIL-STD-1837B

TABLE 100.XXII. Sixteen-hole rectangular mounting pads.

Gross size (inches)	Through hole diameter (inches)	PIN M38527/
450 x .850	.035	06-007

TABLE 100.XXIII. Vertical mounting pads

Number of holes	Gross size LxWxH (inches)	Through hole diameter (inches)	PIN M38527/
2	.250 x .100 x .312	.030	11-001 and -004
2	.250 x .100 x .437	.030	11-002 and -005
2	.250 x .150 x .562	.040	11-003 and -006
4	.250 x .200 x .312	.030	11-007 and -010
4	.250 x .200 x .437	.030	11-008 and -011
4	.250 x .300 x .562	.040	11-009 and -012
6	.250 x .300 x .312	.030	11-013 and -016
6	.250 x .300 x .437	.030	11-014 and -017
6	.250 x .450 x .562	.040	11-015 and -018
8	.250 x .400 x .312	.030	11-019 and -022
8	.250 x .400 x .437	.030	11-020 and -023
8	.250 x .600 x .562	.040	11-021 and -024

MIL-STD-1837B

SECTION 200

EMI/RFI GASKETS (MIL-G-83528 and DESC drawings 86128 and 86129)

Type	Available material types	Specification sheet MIL-G-83528/	Page	Figure
Solid circular strips	A,B,C,D,E,F,H,J,K,L	1	200.3	200.1
O-rings	A,B,C,D,E,F,H,J,K,L	2 and 5	200.4	200.2
Solid D-shaped strips	A,B,C,D,E,F,H,J,K,L	3	200.6	200.3
Connector flange mounts	A,B,C,D,E,F,G,H,J,K,L	4	200.7	200.4
Rectangular (D-cross section)	A,B,C,D,E,F,H,K,L	6	200.10	200.5
Hollow D-strips	A,B,C,D,E,F,H,J,K,L	7	200.11	200.6
Hollow P-strips	A,B,C,D,E,F,H,J,K,L	8	200.12	200.7
Solid rectangular strips	A,B,C,D,E,F,H,J,K,L	9	200.13	200.8
Channel strips	A,B,C,D,E,F,J,L	10	200.14	200.9
Hollow O-strips	A,B,C,D,E,F,J,L	11	200.15	200.10
Flat circular washers	A,B,C,D,E,F,H,J,K,L	12	200.16	200.11
Waveguide	C,F,G,H,K	13	200.17	200.12
Solid circular strips	Wire mesh (3 types)	DESC DWG 86129	200.25	200.13
Rectangular, D-type connector	Brass sheet	DESC DWG 86128	200.26	200.14

Material types for MIL-G-83528 gaskets (indicated by an "X" in the PIN's on the following pages).

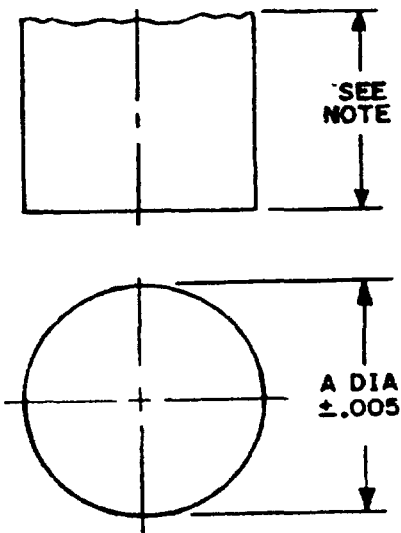
- A. Silver-plated copper-filled silicone capable of 110 dB of plane wave shielding effectiveness at 10 GHz with a continuous use temperature range of -55°C to +125°C.
- B. Silver-plated aluminum-filled silicone capable of 100 dB of plane wave shielding effectiveness at 10 GHz with a continuous use temperature range of -65°C to +160°C.
- C. Silver-plated copper-filled fluorosilicone capable of 110 dB of plane wave shielding effectiveness at 10 GHz with a continuous use temperature range of -55°C to +125°C and resistant to solvents and jet fuels.

MIL-STD-1837B

- D. Silver-plated, aluminum-filled fluorosilicone capable of 90 dB of plane wave shielding effectiveness at 10 GHz, and resistant to solvents and jet fuels with a continuous use temperature range of -55°C to +160°C.
- E. Medium durometer, pure silver-filled silicone capable of 110 dB of plane wave shielding effectiveness at 10 GHz with a continuous use temperature range of -55°C to +160°C.
- F. Pure silver-filled fluorosilicone capable of 110 dB of plane wave shielding effectiveness at 10 GHz with a continuous use temperature range of -65°C to +160°C and resistant to solvents and jet fuels.
- G. Silver-plated, copper-filled silicone, expanded copper foil reinforced capable of 110 dB of plane wave shielding effectiveness at 10 GHz with a continuous use temperature range of -45°C to +125°C.
- H. High durometer, pure silver-filled silicone capable of 110 dB of plane wave shielding effectiveness at 10 GHz with a continuous use temperature range of -55°C to +160°C.
- J. Low durometer, pure silver-filled silicone, capable of 80 dB of plane wave shielding effectiveness at 10 GHz with a continuous use temperature range of -55°C to +160°C.
- K. High durometer, silver-plated copper-filled silicone, capable of 110 dB of plane wave shielding effectiveness at 10 GHz with a continuous use temperature range of -45°C to +125°C.
- L. Silver-plated, nickel-filled silicone rubber capable of 100 dB of plane wave shielding effectiveness at 10 GHz with a continuous use temperature range of -55°C to +125°C.
- M. Silver-plated, glass-filled silicone rubber capable of 100 dB of plane wave shielding effectiveness at 10 GHz with a continuous use temperature range of -55°C to +160°C.

NOTE Salt spray environments. All EMI gasket materials (metal and elastomer) to varying degrees are incompatible with certain flange surfaces. Design of the joint, therefore, plays a central role in determining the electrical stability and corrosion resistance of the joint. Design variables include: Flange material and finish, gasket filler and form (i.e., sheet, O-ring in a groove, etc.), use of parallel nonconductive environmental gaskets, mechanical design, and use of insulating coatings. Choice of the design options should depend on: Environment of the application, levels of shielding effectiveness required versus frequency, and expected life of the equipment. When designing for salt spray environments, all of the preceding factors must be considered.

MIL-STD-1837B

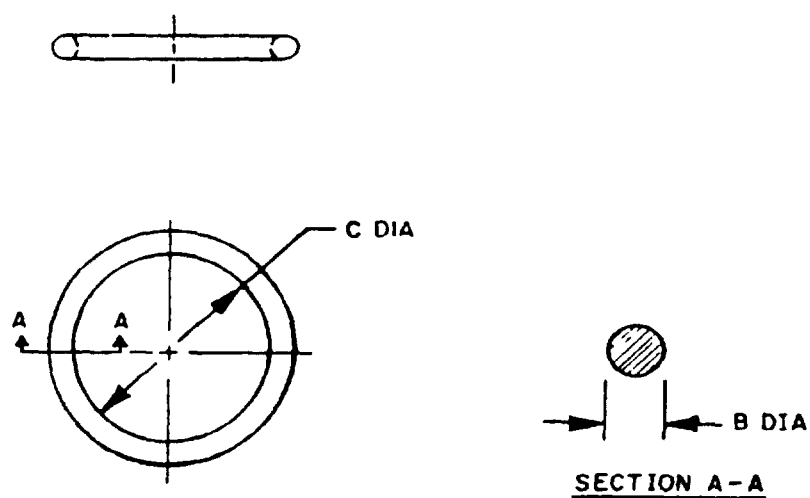


PIN M83528/001X	Dimension A ±.005 inch
001	.040
002	.053
003	.062
004	.070
005	.080
006	.093
007	.103
008	.119
009	.125
010	.139
011	.188
012	.216
013	.250

NOTE: Length shall be as specified on the acquisition document.

FIGURE 200.1. MIL-G-83528/1 (solid circular strips).

MIL-STD-1837B



NOTES:

1. Tolerances on dimensions vary with gasket size
2. Flash tolerance shall be $\pm .800$ on extension and $\pm .500$ on thickness.

FIGURE 200.2. MIL-G-83528/2 and MIL-G-83528/5 (O-rings).

MIL-STD-1837B

Standard sizes

PIN M83528/002X	Dimensions	
	B	C
007	.070	.145
011	.070	.301
012	.070	.364
013	.070	.426
014	.070	.489
015	.070	.551
017	.070	.676
018	.070	.739
019	.070	.801
020	.070	.864
021	.070	.926
022	.070	.989
024	.070	1.114
026	.070	1.239
028	.070	1.364
114	.103	.612
115	.103	.676

PIN M83528/002X	Dimensions	
	B	C
117	.103	.799
126	.103	1.362
128	.103	1.487
132	.103	1.737
142	.103	2.362
155	.103	3.987

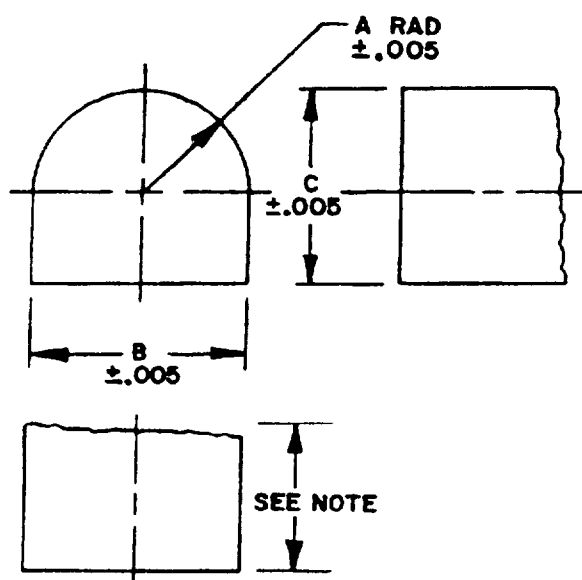
Non-standard sizes

PIN M83528/005X	Dimensions	
	B	C
001	.030	.442
002	.030	.577
003	.030	.692
004	.030	.817
005	.039	.425
006	.048	.295
007	.050	.533

PIN M83528/005X	Dimensions	
	B	C
008	.051	.446
009	.057	.415
010	.063	.541
011	.063	.648
012	.068	.847
013	.068	1.182
014	.068	3.165
015	.070	.495
016	.070	.610
017	.070	.635
018	.070	.667
019	.070	.860
020	.070	1.230
021	.103	1.040
022	.103	1.612
023	.103	1.790

FIGURE 200.2. MIL-G-83528/2 and 83528/5 (O-rings) - Continued.

MIL-STD-1837B



PIN M83528/003X	Dimension A ±.005	Dimension B ±.005	Dimension C ± .005
001	.031	.062	.068
002	.047	.094	.078
003	.039	.078	.089
004	.047	.094	.094
005	.031	.062	.100
006	.075	.150	.110
007	.061	.122	.135
008	.059	.118	.156
009	.078	.156	.156
010	.089	.178	.175
011	.094	.188	.188
012	.125	.250	.250

NOTE. Length shall be as specified on the acquisition document

FIGURE 200.3. MIL-G-83528/3 (solid D-strips)

MIL-STD-1837B

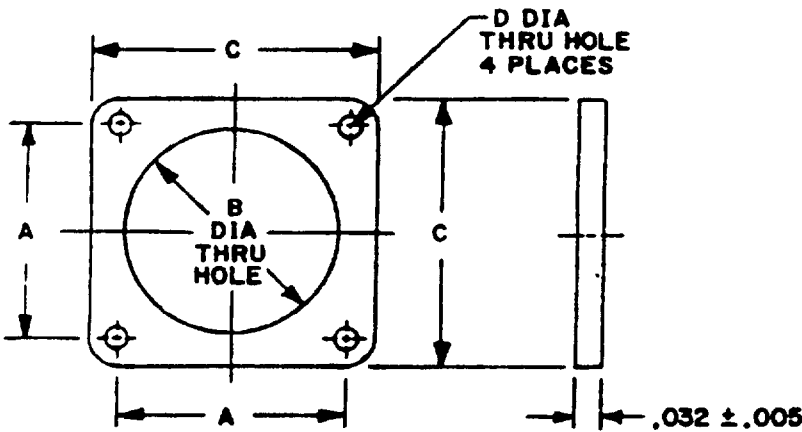


FIGURE 200.4 MIL-6-83528/4 (connector flange)

MIL-STD-18738

PIN M3528/ 004X	A ± .010	B +.020 -.000	C ± .015	D ± .010	Connector shell size									
					MIL-C-38999				MIL-C- 81511	MS90484	MIL-C- 5015	MIL-C- 83723	NAS 1599	MIL-C- 26482
					Series I	Series II	Series III	Series IV						
001	.469	.375	.738	.141							6		6	6
002	.594	.630	.840	.135		8								
003	.594	.568	.812	.125				8	8					
004	.594	.500	.875	.156										
005	.719	.750	.965	.135	9	10				8	8	8	8	8
006	.719	.680	.937	.125				10	10					
007	.719	.625	1.000	.156						10	10	10	10	10
008	.812	.875	1.060	.141	11	12	11							
009	.813	.750	1.094	.141						12	12	12	12	12
010	.906	1.005	1.153	.135	13	14	13							
011	.906	.938	1.125	.125				14	14					
012	.906	.875	1.188	.156						14	14	14	14	14
013	.969	1.135	1.258	.156	15	16	15							
014	.969	1.063	1.250	.125				16	16					
015	.969	1.000	1.281	.156						16	16	16	16	16
016	1.062	1.260	1.351	.156	17	18	17							
017	1.062	1.189	1.343	.125				18	18					

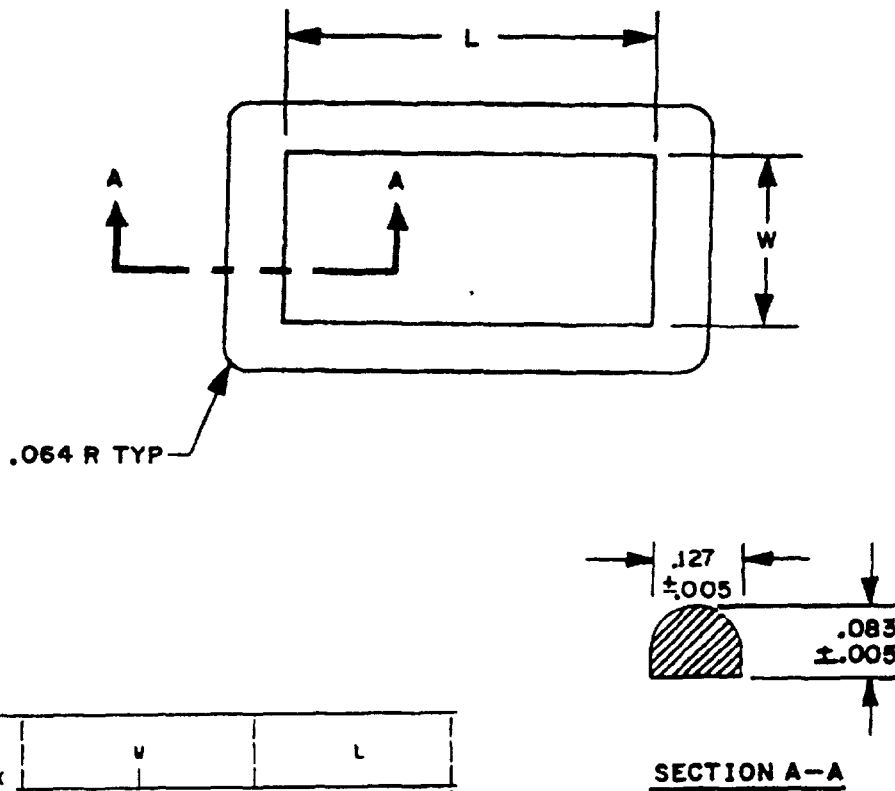
FIGURE 200 4 MIL-G-83528/4 (connector flange) - Continued.

MIL-STD-18738

PIN	A ± .010	B +.020 -.000	C ± .015	D ± .010	Connector shell size												
					MIL-C-38999				MIL-C- 81511	MS90484	MIL-C- 5015	MIL-C- 83723	NAS 1599	MIL-C- 26482			
					Series I	Series II	Series IV										
M3528/ 004X																	
018	1 .062	1 .135	1 .375	.156								18	18	18	18		
019	1 .156	1 .375	1 .500	.141	19	20	19										
020	1 .156	1 .312	1 .467	.125					20	20							
021	1 .156	1 .250	1 .500	.172								20	20	20	20		
022	1 .250	1 .500	1 .625	.141	21	21	21										
023	1 .250	1 .437	1 .562	.125					22	22							
024	1 .250	1 .375	1 .625	.172								22	22	22	22		
025	1 .375	1 .625	1 .750	.172	23	24	23										
026	1 .375	1 .563	1 .703	.152					24	24							
027	1 .375	1 .500	1 .750	.203								24	24	24	24		
028	1 .500	1 .750	1 .875	.172	25		25										
029	1 .562	1 .750	2 .000	.203									28	28	28		
030	1 .750	2 .000	2 .250	.219									32	32	32		
031	1 .938	2 .250	2 .500	.219									36	36	36		
032	2 .188	2 .500	2 .750	.219									40	40	40		
033	2 .375	2 .781	3 .000	.219									44	44	44		
034	2 .625	3 .031	3 .250	.219									48	48	48		

FIGURE 200.4 MIL-6-83528/4 (connector flange) - Continued.

MIL-STD-1837B



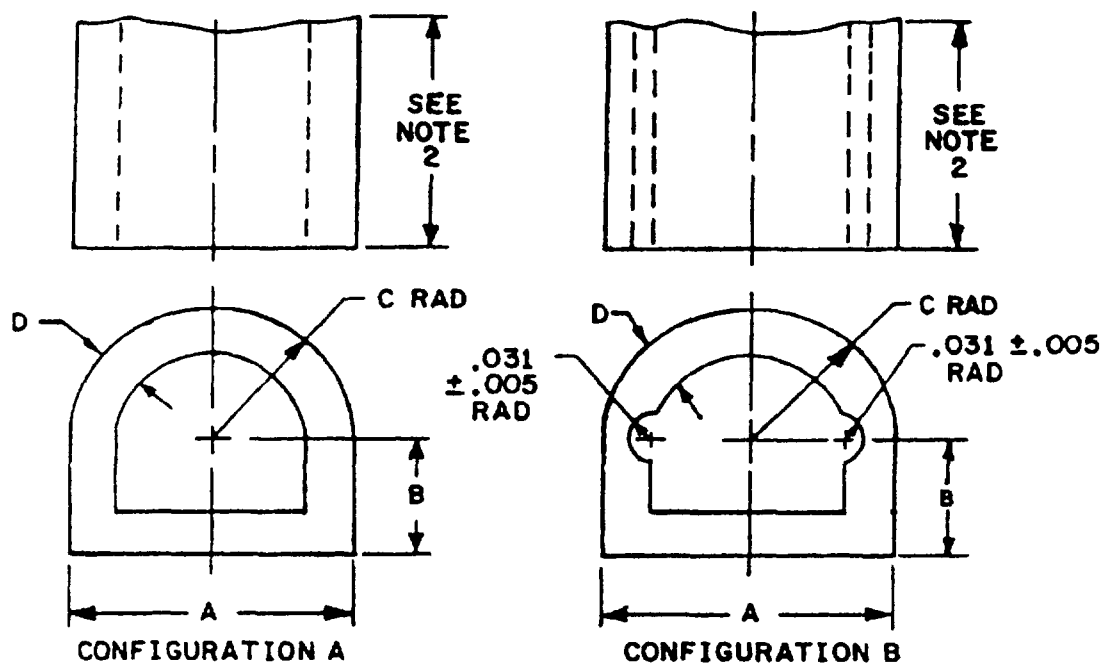
PIN M83528/006X	W		L	
	Min	Max	Min	Max
001	.285 (7.24)	.295 (7.49)	.983 (24.97)	.993 (25.22)
002	.485 (12.32)	.495 (11.81)	.983 (24.97)	.993 (25.22)
003	.619 (15.72)	.629 (15.96)	1.243 (31.57)	1.253 (31.83)

Inches	mm
.005	0.13
.064	1.63
.083	2.11
.127	3.23

NOTE: Flash tolerances shall be $\pm .800$ (20.32 mm) on extension and $\pm .500$ (± 13 mm) on thickness.

FIGURE 200.5. MIL-6-83528/6 (rectangular, D-cross section)

MIL-STD-1837B



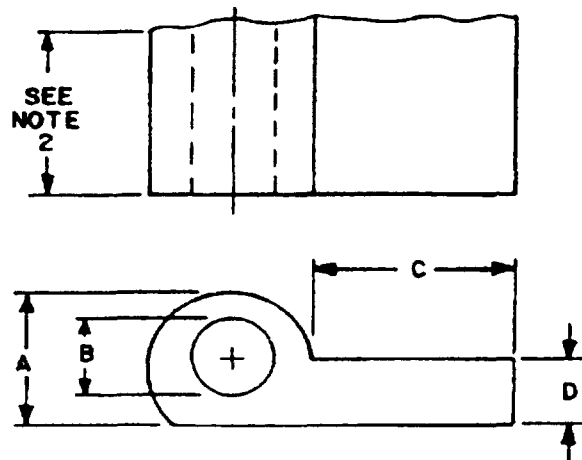
PIN M83528/ 007X	Nominal dimensions				Configuration
	A	B	C(rad)	D	
001	.156	.078	.078	.045	A
002	.187	.093	.093	.050	A
003	.312	.156	.156	.062	A
004	.312	.156	.156	.062	B
005	.312	.200	.112	.062	A
006	.487	.080	.244	.080	A

NOTES:

1. Tolerances on dimensions vary with gasket size.
2. Length shall be as specified on the acquisition document.

FIGURE 200.6. MIL-G-83528/7 (hollow D-strips)

MIL-STD-1837B



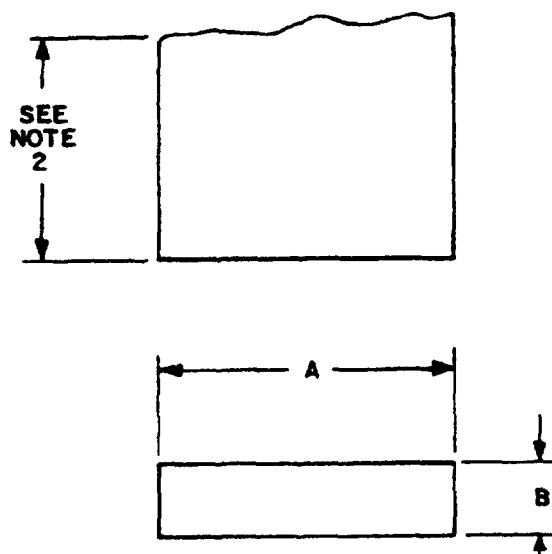
PIN M83528/008X	Nominal dimensions			
	A	B(dia)	C	D
001	.200	.080	.650	.062
002	.250	.125	.250	.062
003	.250	.125	.375	.062
004	.250	.150	.375	.062
005	.312	.187	.563	.062
006	.360	.225	.420	.070
007	.200	.080	.275	.062
008	.250	.125	.625	.062

NOTES.

- 1 Tolerances on dimensions vary with gasket size.
- 2 Length shall be as specified on the acquisition document

FIGURE 200.7. MIL-G-83528/B (hollow P-strips)

MIL-STD-1837B



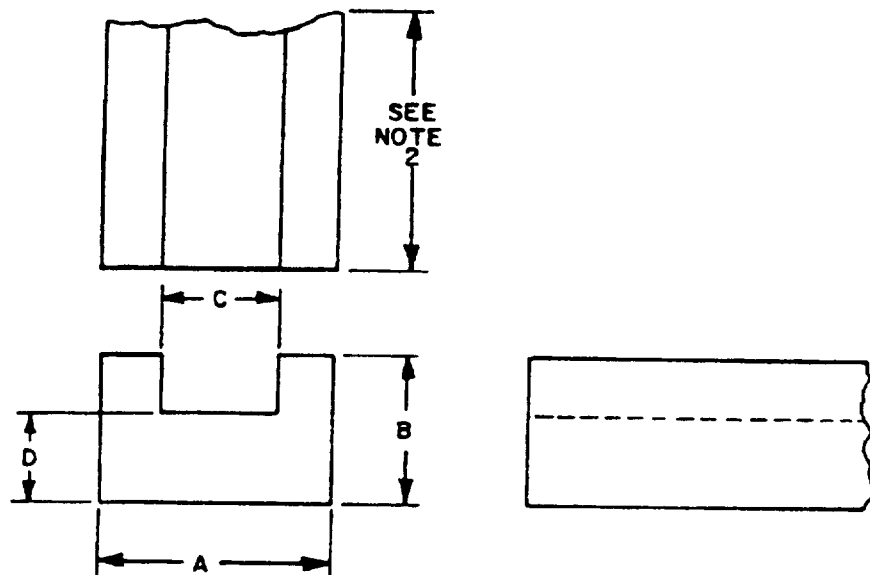
PIN	Nominal dimensions		PIN	Nominal dimensions	
M83528/009X	A	B	M83528/009X	A	B
001	.063	.042	008	.500	.125
002	.095	.062	009	.500	.188
003	.120	.075	010	.750	.062
004	.125	.062	011	.880	.062
005	.156	.062	012	1.000	.250
006	.250	.062	013	1.180	.062
007	.500	.075			

NOTES.

1. Tolerances on dimensions vary with gasket size.
2. Length shall be as specified on the acquisition document

FIGURE 200.8. MIL-G-83528/9 (solid rectangular strips).

MIL-STD-1837B



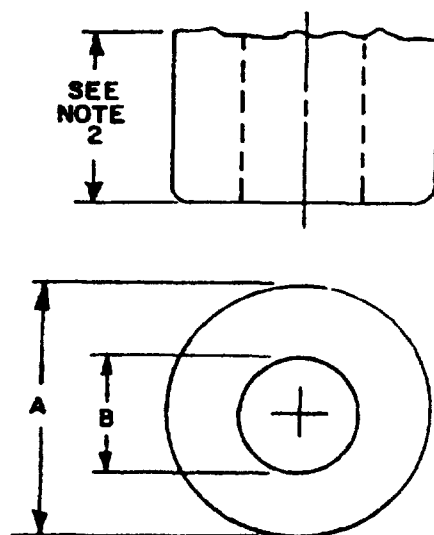
PIN M83528/ 010X	Nominal dimensions			
	A	B	C	D
001	.100	.100	.034	.033
002	.126	.110	.025	.050
003	.126	.225	.020	.075
004	.156	.156	.062	.047
005	.175	.156	.047	.075
006	.327	.235	.062	.115

NOTES

- 1 Tolerances on dimensions vary with gasket size
- 2 Length shall be as specified on the acquisition document.

FIGURE 200.9 MIL-6-83528/10 (channel strips)

MIL-STD-1837B



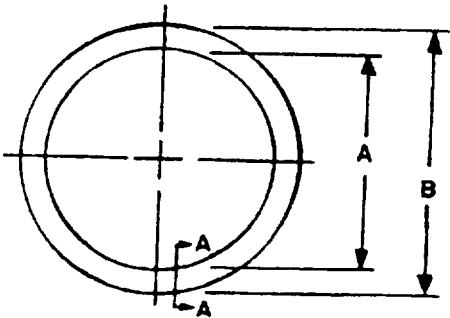
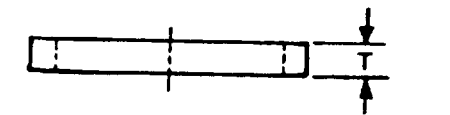
PIN M83528/O11X	Dimensions	
	A	B
001	.125	.045
002	.156	.050
003	.250	.125
004	.312	.192
005	.375	.250
006	.125	.062

NOTES:

1. Tolerances on dimensions vary with gasket size
2. Length shall be as specified on the acquisition document.

FIGURE 200.10. MIL-G-83528/11 (hollow O-strips).

MIL-STD-1837B



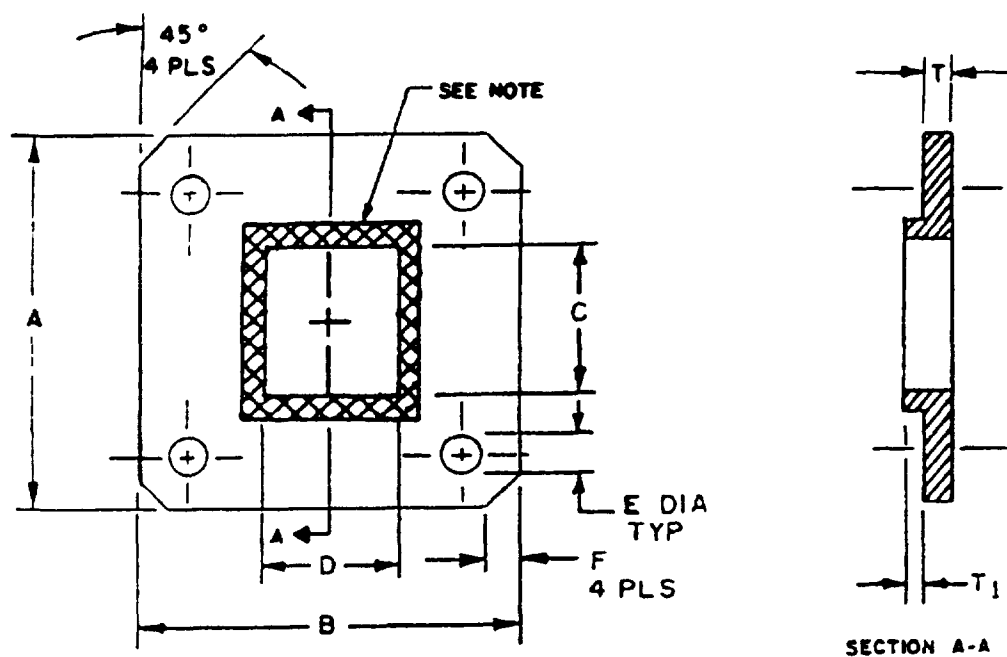
SECTION A-A

PIN M83528/012X	Nominal diameters		
	A	B	T
001	250	625	.031
002			.062
003	375	750	.031
004			.062
005	.500	.656	.031
006			.062
007	.500	.875	.031
008			.062
009	.750	1.000	.031
010			.062
011	1.000	1.438	.031
012			.062

NOTE Tolerances on dimensions vary with gasket size.

FIGURE 200.11. MIL-G-83528/12 (flat circular washers).

MIL-STD-1837B

**CONFIGURATION A - DIE CUT SQUARE AND RECTANGULAR**

NOTE: Shaded area indicates optional raised lip. When included, the lip shall be a nominal of .187 (4.75 mm) wide. Thickness T_1 shall be $.004$ (0.10 mm) \pm $.002$ (0.05 mm). Lip is available only on the parts so identified in table 1 of MIL-G-83528/13.

FIGURE 200 12 MIL-G-83528/13 (waveguide).

MIL-STD-1837B

Dimensions							PIN M83528/013X	Cross section area (cm ²) 2/
A	B	C	D	E 1/	T	F		
± .015 (0.38)	± .015 (0.38)	+.015 (0.38) -.000 (0.00)	+.015 (0.38) -.000 (0.00)	± .010 (0.25)	± .003 (0.08)			
.750 (19.05)	.750 (19.05)	.145 (3.68)	.285 (7.24)	.116 (2.95)	.027 (0.69)	.469 (11.91)	001	.0082 (0.208)
.875 (22.23)	.875 (22.23)	.175 (4.45)	.425 (10.80)	.116 (2.95)	.027 (0.69)	.563 (14.30)	003	.0095 (0.241)
1.313 (33.35)	1.313 (33.35)	.630 (16.00)	.320 (8.13)	.140 (3.56)	.027 (0.69)	.875 (22.23)	005	.0092 (0.234)
1.496 (38.00)	1.496 (38.00)	.760 (19.30)	.385 (9.78)	.155 (3.94)	.027 (0.69)	.450 (11.43)	007	.0099 (0.251)
1.625 (41.28)	1.625 (41.28)	.905 (22.99)	.405 (10.29)	.169 (4.29)	.027 (0.69)	.469 (11.91)	009	.0097 (0.246)
1.594 (40.49)	2.094 (53.19)	.405 (10.29)	.905 (22.99)	.169 (4.29)	.027 (0.69)	.250 (6.35)	010	.0161 (0.408)
1.875 (47.63)	1.875 (47.63)	1.130 (28.70)	.505 (12.83)	.180 (4.57)	.027 (0.69)	1.150 (29.21)	015	.0101 (0.257)
1.750 (44.45)	2.500 (63.50)	.505 (12.83)	1.130 (28.70)	.171 (4.34)	.027 (0.69)	.250 (6.35)	016	.076 (19.30)
1.937 (49.20)	2.687 (68.25)	.633 (16.08)	1.380 (35.05)	.206 (5.23)	.027 (0.69)	.250 (6.35)	020	.0176 (0.447)
1.531 (38.89)	2.281 (57.94)	.632 (16.05)	1.382 (35.10)	.150 (3.81)	.027 (0.69)	.125 (6.35)	021	.0121 (0.307)
2.438 (61.93)	3.188 (80.98)	.805 (20.45)	1.600 (40.64)	.257 (6.53)	.027 (0.69)	.313 (7.95)	024	.0220 (0.559)
1.750 (44.45)	2.500 (63.50)	.800 (20.32)	1.600 (40.64)	.160 (4.06) .150 (3.81)	.027 (0.69)	.125 (3.18)	025	.0128 (0.325)

See footnotes on next page.

FIGURE 200 12 MIL-G-83528/13 (waveguide) - Continued

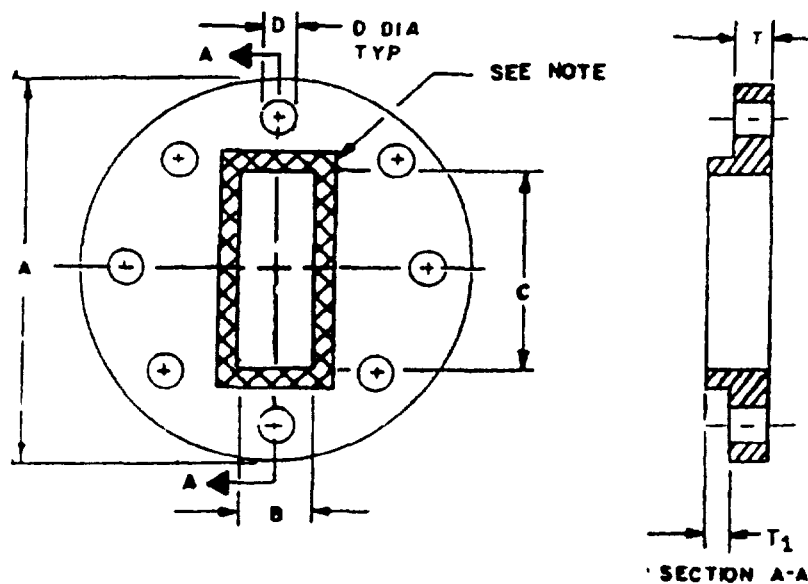
MIL-STD-1837B

Dimensions							PIN M83528/013X	Cross section area (cm ²) 2/
A	B	C	D	E 1/	T	F		
±.015 (0.38)	±.015 (0.38)	+ .015 (0.38) - .000 (0.00)	+ .015 (0.38) - .000 (0.00)	±.010 (0.25)	±.003 (0.08)			
3.50 (88.90)	2.900 (63.50)	1.880 (47.75)	.880 (22.35)	.266 (6.76)	.027 (0.69)	.313 (7.95)	027	.0219 (0.556)
1.784 (45.31)	2.781 (70.64)	.882 (22.40)	1.882 (47.80)	.156 (3.96) .141 (3.58)	.027 (0.69)	.125 (3.18)	028	.0122 (0.310)
2.750 (69.85)	3.875 (98.43)	1.155 (29.34)	2.300 (58.42)	.270 (6.86)	.027 (0.69)	.312 (7.92)	031	.0215 (0.546)
2.000 (50.80)	3.156 (80.16)	1.155 (29.34)	2.300 (58.42)	.150 (3.81)	.027 (0.69)	.125 (3.18)	032	.0114 (0.290)
4.500 (114.30)	3.000 (76.20)	2.850 (72.39)	1.350 (34.29)	.266 (6.76)	.027 (0.69)	.313 (7.95)	034	.0223 (0.566)
3.844 (97.64)	2.344 (59.54)	2.850 (72.39)	1.350 (34.29)	.172 (4.37) .188 (4.78)	.027 (0.69)	.125 (3.18)	035	.0134 (0.340)
3.750 (95.25)	5.440 (138.18)	1.710 (43.43)	3.410 (86.61)	.264 (6.71) .250 (6.35)	.027 (0.69)	.250 (6.35)	038	.0275 (0.698)
3.750 (95.25)	5.438 (138.13)	1.710 (43.43)	3.410 (86.61)	.266 (6.76)	.027 (0.69)	.250 (6.35)	039	.0275 (0.698)
4.188 (106.38)	6.344 (161.14)	2.160 (54.86)	4.310 (109.47)	.266 (6.76) .281 (7.14)	.027 (0.69)	.250 (6.35)	040	.0274 (0.696)
6.344 (161.14)	4.188 (106.38)	4.310 (109.47)	2.160 (54.86)	.266 (6.76)	.027 (0.69)	.250 (6.35)	041	.0275 (0.698)
5.438 (138.13)	8.688 (220.68)	3.260 (82.80)	6.510 (165.35)	.250 (6.35) .328 (8.33)	.027 (0.69)	.250 (6.35)	042	.0294 (0.746)

- 1/ Number and location of holes conform to holes in standard waveguide flanges (see MIL-F-3922).
Where two-hole diameters are given, flange has holes of two different diameters.
- 2/ For calculation of volume resistivity (surface probe).

FIGURE 200.12. MIL-G-83528/13 (waveguide) - Continued

MIL-STD-1837B



CONFIGURATION B - DIE-CUT CIRCULAR

NOTE

Shaded area indicates optional raised lip. When included, the lip shall be a nominal of .187 (4.75 mm) wide. Thickness T_1 shall be $.004$ (0.10 mm) $\pm .002$ (0.05 mm). Lip is available only on the parts so identified in table I of MIL-G-83528/13.

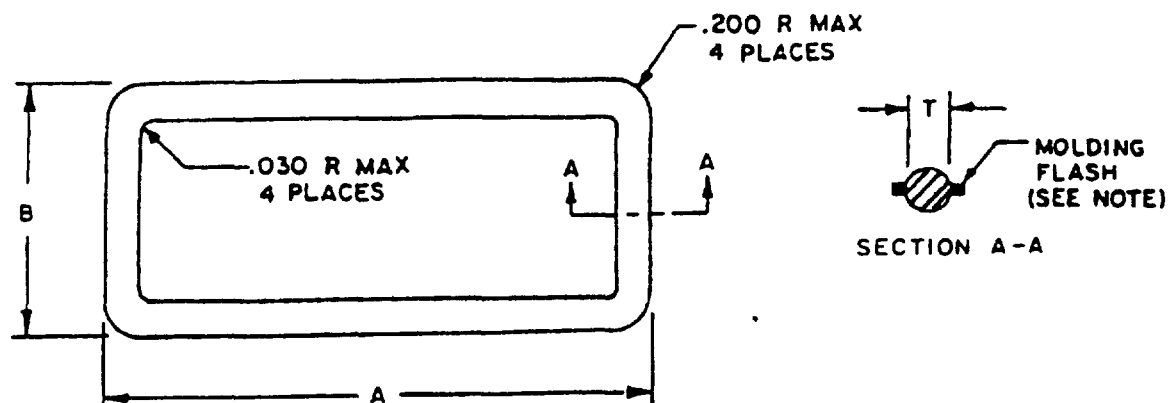
Dimensions					PIN M83528/013X	Cross section area (cm ²) 2/
A	B	C	D 1/	T		
$\pm .015$ (0.38)	$+.015$ (0.38) -0.000 (0.00)	$+.015$ (0.38) -0.000 (0.00)	$\pm .010$ (0.25)	$\pm .005$ (0.13)		
3.125 (79.38)	.632 (16.05)	1.382 (35.10)	.234 (5.94)	.027 (0.69)	019	.0337 (0.856)
3.625 (92.08)	.882 (22.40)	1.882 (47.80)	.234 (5.94)	.027 (0.69)	026	.0370 (0.940)
5.312 (134.92)	1.350 (34.29)	2.850 (72.39)	.290 (7.37)	.027 (0.69)	033	.0535 (1.359)

1/ Number and location of holes conform to holes in standard waveguide flanges identified in MIL-F-3922

2/ For calculation of volume resistivity (surface probe)

FIGURE 200.12. MIL-G-83528/13 (waveguide) - Continued

MIL-STD-1837B

CONFIGURATION C - MOLDED RECTANGULAR WITH "O" CROSS SECTION

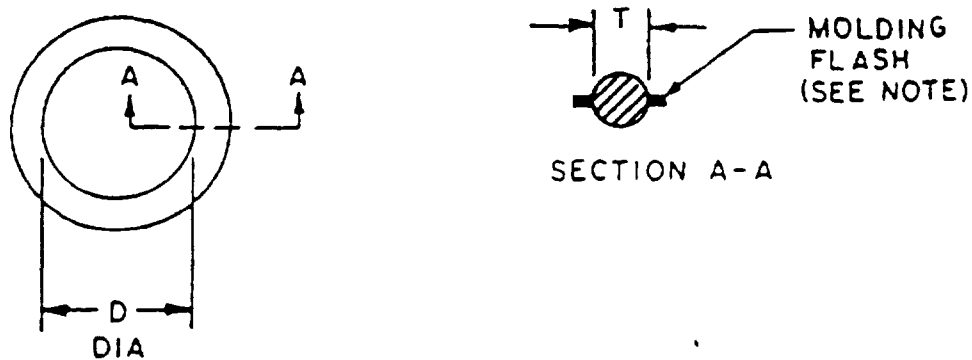
NOTE Holding flash of .003 (0.08 mm) in width (maximum) and .005 (0.13 mm) in thickness (maximum) is allowed.

Dimensions			PIN M83528/013x	Cross section area (cm ²) 1/
A	B	T dia		
1.368 (34.75) ±.012 (0.30)	.868 (22.05) ±.010 (0.25)	.103 (2.62) ±.003 (0.08)	013	.0083 (0.211)
1.616 (41.05) ±.015 (0.38)	.991 (25.17) ±.010 (0.25)	.103 (2.62) ±.003 (0.08)	018	.0083 (0.211)
1.866 (47.40) ±.015 (0.38)	1.116 (28.35) ±.012 (0.30)	.103 (2.62) ±.003 (0.08)	023	.0083 (0.211)
2.449 (62.20) ±.020 (0.51)	1.449 (36.80) ±.013 (0.33)	.139 (3.53) ±.004 (0.10)	030	.0152 (0.386)
3.451 (87.66) ±.024 (0.61)	1.951 (49.56) ±.018 (0.46)	.139 (3.53) ±.004 (0.10)	037	.0152 (0.386)

1/ For calculation of volume resistivity (surface probe)

FIGURE 200.12. MIL-G-83528/13 (waveguide) - Continued.

MIL-STD-1837B



CONFIGURATION D - MOLDED CIRCULAR WITH "O" CROSS SECTION

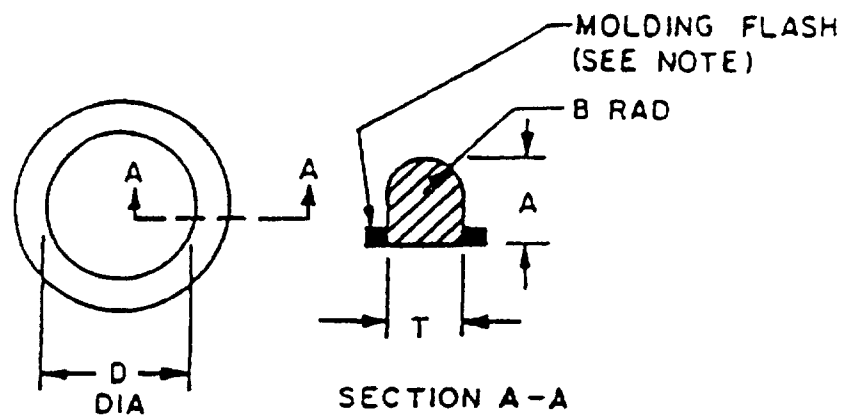
NOTE: Molding flash of .003 (0.08 mm) in width (maximum) and .005 (0.13 mm) in thickness (maximum) is allowed

Dimensions		PIN M83528/013X	Cross section area (cm ²) 1/
D (ID)	T		
2.011 (51.08) ±.018 (0.46)	.139 (3.53) ±.004 (.010)	022	.0150 (0.381)
2.683 (68.15) ±.024 (0.61)	.115 (2.92) ±.004 (.010)	029	.0104 (0.264)

1/ For calculation of volume resistivity (surface probe)

FIGURE 200.12 MIL-G-83528/13 (waveguide) - Continued

MIL-STD-1837B



CONFIGURATION E - MOLDED CIRCULAR WITH "D" CROSS SECTION

NOTE: Molding flash of .003 (0.08 mm) in width (maximum) and .005 (0.13 mm) in thickness (maximum) is allowed.

FIGURE 200 12. MIL-G-83528/13 (waveguide) - Continued.

MIL-STD-1837B

Dimensions <u>1/</u>				PIN M83528/013X	Cross section area (cm ²) <u>2/</u>
A	B	D (ID)	T		
.056 (1.42)	.041 (1.04)	.410 (10.41)	.082 (2.08)	002	.025 (0.64)
.048 (1.22)	Full rad. ---	.587 (14.91)	.078 (1.98)	004	.020 (0.51)
.125 (3.18)	Full rad. ---	.885 (22.48)	.155 (3.94)	006	.109 (2.77)
.065 (1.65)	.049 (1.24)	1.122 (28.50)	.099 (2.51)	008	.035 (0.89)
.088 (2.24)	Full rad. ---	1.340 (34.04)	.095 (2.41)	011	.048 (1.22)
.077 (1.96)	Full rad. ---	1.310 (33.27)	.115 (2.92)	012	.048 (1.22)
.085 (2.16)	Full rad. ---	1.392 (35.36)	.095 (2.41)	014	.046 (1.17)
.078 (1.98)	Full rad. ---	1.550 (39.37)	.105 (2.67)	017	.045 (1.14)
.188 (4.78)	Full rad. ---	3.910 (99.31) ± .026 (0.66)	.240 (6.10)	036	.251 (6.38)

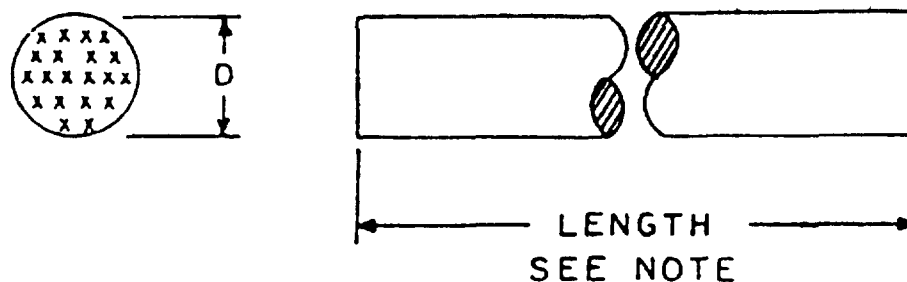
1/ Unless otherwise indicated, tolerances are:

Dimensions	Tolerance
Under .101 (2.57)	±.005 (0.13)
.101 to .200 (2.57 to 5.08)	±.008 (0.20)
.201 to .300 (5.10 to 7.62)	±.010 (0.25)
.301 to .500 (7.62 to 12.70)	±.015 (0.38)
Over .500 (12.70)	±.020 (0.51)

2/ For calculation of volume resistivity (surface probe)

FIGURE 200 12. MIL-G-83528/13 (waveguide) - Continued

MIL-STD-1837B



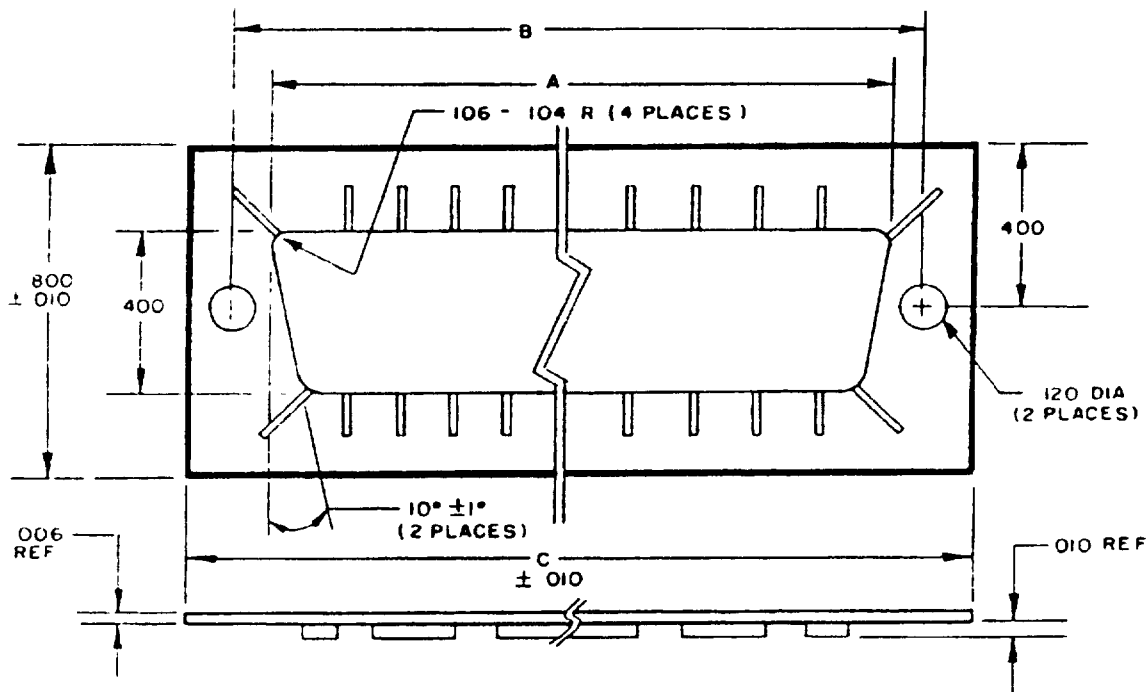
NOTE: Length shall be as specified on the acquisition document.

PIN 86129* (see note)	Dimension D	
	Inches	mm
01	.063	(1.60)
02	.094	(2.39)
03	.125	(3.18)
04	.156	(3.96)
05	.188	(4.78)
06	.250	(6.35)
07	.313	(7.95)
08	.375	(9.53)
09	.438	(11.13)
10	.500	(12.70)

NOTE: Asterisk indicates wire mesh type. Insert A for tin/phosphor bronze, B for tin/copper/steel; or C for monel.

FIGURE 200.13. DESC drawing 86129 (solid circular strips, wire mesh).

MIL-STD-1837B



NOTE: Material is 006 inch thick brass sheet

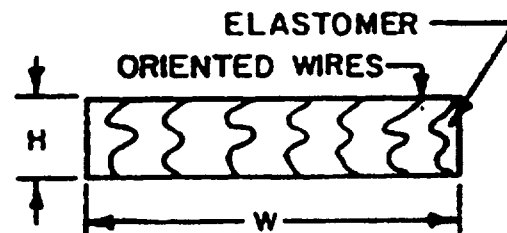
Inches	mm	Inches	mm
.006	0.15	1.220	30.48
.010	0.25	1.312	33.32
.104	2.64	1.555	39.50
.106	2.69	1.614	41.00
.120	3.05	1.852	47.04
.400	10.16	2.100	53.34
.746	18.95	2.266	57.56
.800	20.32	2.500	63.50
.984	24.99	2.730	69.34
1.074	27.28		

PIN 86128-	Dimensions		
	A	B	C
01	.746	.984	1.220
02	1.074	1.312	1.555
03	1.614	1.852	2.100
04	2.266	2.500	2.730

FIGURE 200.14 DESC drawing 86128 (rectangular, D-type connector)

MIL-STD-1837B

PIN 90046-	Dim H	Dim W	PIN 90046-	Dim H	Dim W
001	.062	.125	016	.125	.500
002	.062	.250	017	.125	.750
003	.062	.375	018	.125	1.000
004	.062	.500	019	.187	.125
005	.062	.750	020	.187	.250
006	.062	1.000	021	.187	.375
007	.093	.125	022	.187	.500
008	.093	.250	023	.187	.750
009	.093	.375	024	.187	1.000
010	.093	.500	025	.250	.125
011	.093	.750	026	.250	.250
012	.093	1.000	027	.250	.375
013	.125	.125	028	.250	.500
014	.125	.250	029	.250	.750
015	.125	.375	030	.250	1.000



Tolerances			
Dim From	Dim To	W Tol	H Tol
.062	.092	±.015	+.010 - .005
.093	.250	± .015	+ .010
.375	.750	± .047	---
1.000	---	± .062	---

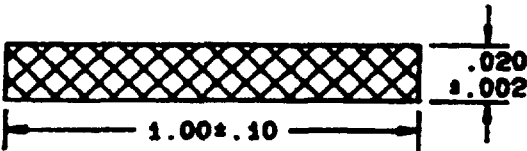
Inches	mm
.005	0.13
.010	0.25
.047	1.19
.062	1.57
.093	2.36
.125	3.18
.187	4.75
.250	6.35
.375	9.53
.500	12.70
.750	19.05
1.000	25.40

NOTES:

1. Length shall be as specified in the acquisition document.
2. Abbreviated PIN shown. See DESC drawing 90046 for complete PIN format.
3. Available wire types: monel, phosphor bronze, aluminum alloy
4. Available elastomer types: solid silicone rubber, solid fluorosilicone rubber, closed cell, silicone sponge rubber
5. All parts available with adhesive on one side.

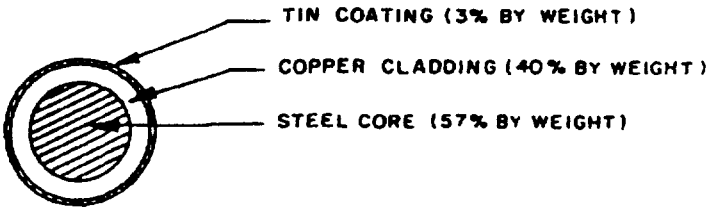
FIGURE 200.15. DESC drawing 90046 (oriented wires in elastomer strips).

MIL-STD-1837B



PIN 90095-	Length (feet)
001	25
002	100
003	1,000

inch	mm	foot	meter
002	0.05	25	7.62
0.20	0.51	100	30.48
0.10	2.5	1,000	304.80
1.00	25.4	---	---



Cross section of individual wires

FIGURE 200.16 DESC drawing 90095 (shielding tape, knitted wire mesh)

MIL-STD-1837B

SECTION 300

DELAY LINES, ACTIVE (MIL-D-83532 and DESC drawings 84087 ^{4/}, 85008, 85009, 85013, 85014, 85019, 85078, 85141 ^{4/}, 85151, 87035, and 88023. ^{1/}

General description	Package type	Package profile	Length	Width	MIL-D-83532 ^{2/} specification sheet number	DESC drawing	Page	Table
1 tap	14-pin DIP	.360	.820	.410	N/A	84087	300.3	300.I
2 taps	14-pin DIP	.360	.820	.410	N/A	84087	300.3	300.II
5 taps	14-pin DIP	.186	.810	.510	1	85008	300.4	300.III
5 taps	14-pin DIP	.250 to .260	.800	.400	1	85013	300.5	300.IV
5 taps	14-pin DIP	.360	.820	.410	1	84087	300.6	300.V
10 taps	14-pin DIP	.315	.800	.450	N/A	85014	300.7	300.VI
10 taps	14-pin DIP	.185 to .360	.800 to .810	.400 to .500	3	N/A	300.7	300.VII
2 delay circuits per package	14-pin DIP	.186	.810	.510	N/A	85009	300.8	300.VIII
3 delay circuits per package	14-pin DIP	.250 to .260	.800	.400	4	85151	300.9	300.IX
3 delay circuits per package	14-pin DIP	.360	.820	.400	N/A	85141	300.11	300.X
3 delay circuits per package (low power) Schottky)	14-pin DIP	.360	.810	.400	N/A	87035	300.12	300.XI
Programmable	16-pin DIP	.377	.820	.410	5	85019	300.13	300.XII
Programmable (ECL)	16-pin DIP	.377	.900	.400	6	85078	300.13	300.XII
Programmable (ECL)	24-pin SM ^{3/}	.300	1.290	.590	N/A	88023	300.14	300.XIII

^{1/} MIL-D-83532 PIN's supersede DESC drawing PIN's when a qualified source is available.

^{2/} Case dimensions of MIL-D-83532 PIN's may vary slightly from those shown.

^{3/} SM = surface mount.

^{4/} DESC drawings 84087 and 85141 are inactive for new design.

MIL-STD-1837B

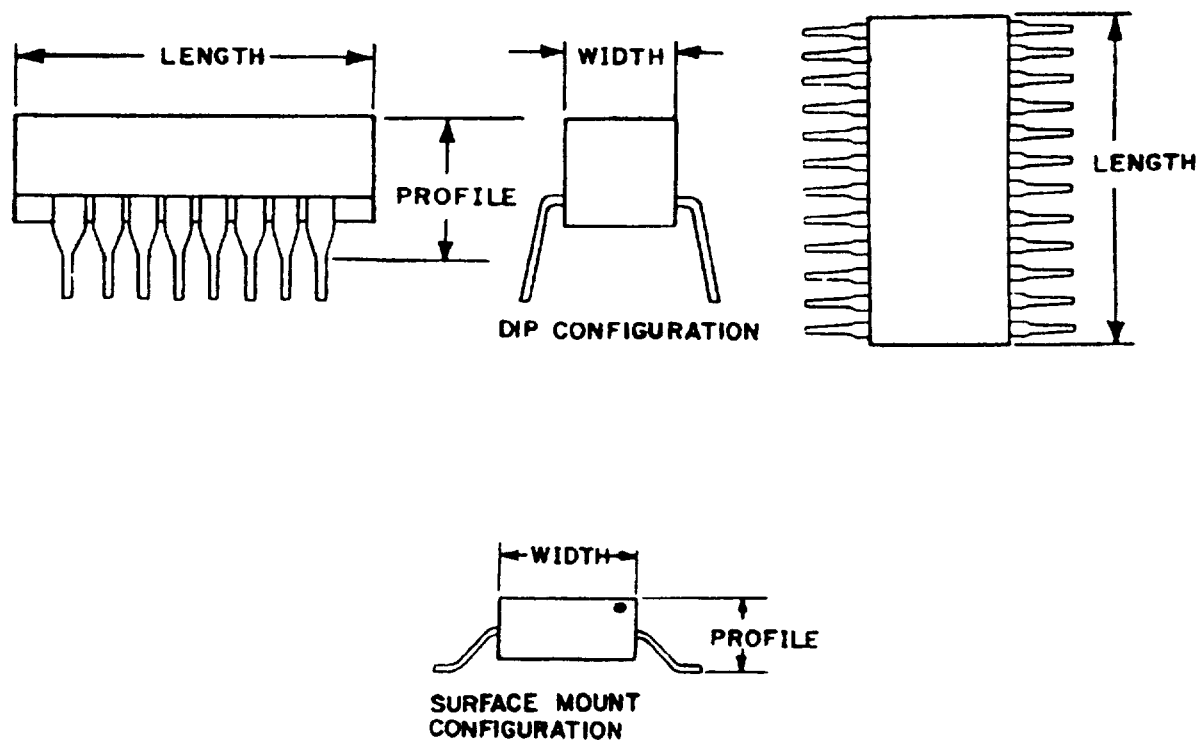


FIGURE 300 1. Delay lines, active, package configurations

MIL-STD-1837B

TABLE 300.I. One tap, 14-pin DIP, .360 inch profile.

Total delay (ns)	DESC drawing PIN 84087-
10	01
20	02
30	03
40	04
50	05
60	06
80	07
100	08
150	09
200	10
300	11
400	12
500	13

TABLE 300.II. Two taps, 14-pin DIP, .360 inch profile.

Total delay (ns)	DESC drawing PIN 84087-
20	14
40	15
50	16
60	17
80	18
100	19
150	20
200	21
300	22
400	23
500	24
110	25

MIL-STD-1837B

TABLE 300.III. Five taps, 14-pin DIP, .186 inch profile. 1/

Total delay (ns)	DESC drawing PIN 85008-	Military 2/ specification PIN M83532/1C
25	01	001
30	02	002
35	03	003
40	04	004
45	05	005
50	06	006
55	---	007
60	---	008
65	---	009
70	---	010
75	07	011
80	---	012
90	---	013
100	08	014
125	09	015
150	10	016
175	11	017
200	12	018
225	13	019
250	14	020
275	---	021
300	15	022
350	16	023
400	17	024
450	18	025
500	19	026
600	---	027
700	---	028
800	---	029
900	---	030
1,000	---	031

- 1/ Where both a DESC drawing PIN and a military specification PIN are shown for the same total delay, the military specification PIN shall be used if a QPL source is available.
- 2/ Abbreviated PIN shown for convenience. See MIL-D-83532 for complete PIN format

MIL-STD-1837B

TABLE 300.IV. Five taps, 14-pin DIP, .250 to .260 inch profile. 1/

Total delay (ns)	DESC drawing PIN 85013-	Military 2/ specification PIN M83532/1B
25	01	001
30	02	002
35	03	003
40	04	004
45	05	005
50	06	006
55	---	007
60	---	008
65	---	009
70	---	010
75	07	011
80	---	012
90	---	013
100	08	014
125	09	015
150	10	016
175	11	017
200	12	018
225	13	019
250	14	020
275	---	021
300	15	022
350	16	023
400	17	024
450	18	025
500	19	026
600	---	027
700	---	028
800	---	029
900	---	030
1,000	---	031

- 1/ Where both a DESC drawing PIN and a military specification PIN are shown for the same total delay, the military specification PIN shall be used if a QPL source is available.
- 2/ Abbreviated PIN shown for convenience. See MIL-D-83532 for complete PIN format.

MIL-STD-1837B

TABLE 300.V. Five taps, 14-pin DIP, .360 inch profile. 1/

Total delay (ns)	DESC drawing PIN 84087-	Military 2/ specification PIN M83532/1A
25	26	001
30	---	002
35	---	003
40	---	004
45	---	005
50	27	006
55	---	007
60	---	008
65	---	009
70	---	010
75	28	011
80	---	012
90	---	013
100	29	014
125	30	015
150	31	016
175	---	017
200	32	018
225	---	019
250	33	020
275	---	021
300	34	022
350	---	023
400	35	024
450	---	025
500	36	026
600	---	027
700	---	028
800	---	029
900	---	030
1,000	---	031

- 1/ Where both a DESC drawing PIN and a military specification PIN are shown for the same total delay, the military specification PIN shall be used if a GPL source is available
- 2/ Abbreviated PIN shown for convenience. See MIL-D-83532 for complete PIN format

MIL-STD-1837B

TABLE 300 VI Ten taps, 14-pin DIP, .315 inch profile.

Total delay (ns)	DESC drawing PIN 85014-
9	01
18	02
22.5	03
50	04
100	05
150	06
200	07
250	08
300	09
400	10
500	11
600	12
700	13

TABLE 300.VII Ten taps, 14-pin DIP, .185 TO .360 inch profile 1/ 2/

Total delay (ns)	Military specification PIN M83532/3*
50	001
75	002
100	003
125	004
150	005
175	006
200	007
250	008
300	009
350	010
400	011
450	012
500	013
600	014
700	015
800	016
900	017
1,000	018

1/ For the following profile dimensions,
insert the appropriate letter in place of
the asterisk in the PIN:

.360-A
.250-B
.185-C

2/ Abbreviated PIN shown for convenience. See
MIL-D-83532 for complete PIN format

MIL-STD-1837B

TABLE 300 VIII. Two delay circuits per package, 14-pin DIP, 186 inch profile.

Total delay per circuit (ns)	DESC drawing PIN 85009-
5	01
6	02
7	03
8	04
9	05
10	06
11	07
12	08
13	09
14	10
15	11
16	12
17	13
18	14
19	15
20	16
21	17
22	18
23	19
24	20
25	21
30	22
35	23
40	24
45	25
50	26
55	27
60	28
65	29
70	30
75	31
80	32
85	33
90	34
95	35
100	36
125	37
150	38
175	39
200	40
225	41
250	42

MIL-STD-1837B

TABLE 300.IX Three delay circuits per package, 14-pin DIP, .250 to .260 inch profile. 1/

Total delay per circuit (ns)	DESC drawing PIN 85151-	Military specification PIN 2/ 3/ M83532/48
5	01	001
6	---	002
7	---	003
8	---	004
9	---	005
10	02	006
11	---	007
12	---	008
13	---	009
14	---	010
15	03	011
16	---	012
18	---	013
20	04	014
25	05	015
30	06	016
35	07	017
40	08	018
45	09	019
50	10	020
55	---	021
60	---	022
70	---	023
75	11	---
80	---	024
90	---	025
100	12	026
120	---	027

See footnotes at end of table.

MIL-STD-1837B

TABLE 300.IX. Three delay circuits per package, 14-pin DIP,
.250 to .260 inch profile - Continued. 1/

Total delay per circuit (ns)	DESC drawing PIN 85151-	Military specification PIN 2/ 3/ M83532/48
125	13	028
150	14	---
175	15	---
200	16	---
225	17	---
250	18	---

- 1/ Where both a DESC drawing PIN and a military specification PIN are shown for the same total delay time, the military specification PIN shall be used if a QPL source is available.
- 2/ Military specification PIN's are also available in .360 profile. For this size, substitute "A" for "B" in PIN.
- 3/ Abbreviated PIN shown for convenience. See MIL-D-83532 for complete PIN format.

MIL-STD-18378

TABLE 300.X. Three delay circuits per package,
14-pin DIP, .360 inch profile.

Total delay per circuit (ns)	DESC drawing PIN 85141-
5	001
6	002
7	003
8	004
9	005
10	006
11	007
12	008
13	009
14	010
15	011
16	012
17	013
18	014
19	015
20	016
21	017
22	018
23	019
24	020
25	021
30	022
35	023
40	024
45	025
50	026
55	027
60	028
65	029
70	030
75	031
80	032
85	033
90	034
95	035
100	036
125	037
150	038
175	039
200	040
225	041
250	042

MIL-STD-1837B

TABLE 300.XI. Three delay circuits per package, 14-pin DIP,
.360 inch profile, low-power Schottky

Total delay (ns)	BESC drawing PIN 87035-
10	01
15	02
20	03
25	04
30	05
35	06
40	07
45	08
50	09
75	10
100	11
125	12
150	13
175	14
200	15
225	16
250	17

MIL-STD-1837B

TABLE 300 XII. Programmable, 16-pin DIP, .377 inch profile. 1/ 2/

Delay per step (ns)	Total delay (ns)	DESC drawing PIN	Military specification PIN 3/ M83532
.5	10.5	85019-01	/5-001
1	14	85019-02	/5-002
1	10	85078-01	/6-001
2	21	85019-03	/5-003
2	17	85078-02	/6-002
3	28	85019-04	/5-004
3	24	85078-03	/6-003
4	31	85078-04	/6-004
5	42	85019-05	/5-005
5	38	85078-05	/6-005
6	45	85078-06	/6-006
7	52	85078-07	/6-007
8	59	85078-08	/6-008
9	66	85078-09	/6-009
10	77	85019-06	/5-006
10	73	85078-10	/6-010
15	112	85019-07	/5-007
15	108	85078-11	/6-011
20	147	85019-08	/5-008
20	143	85078-12	/6-012
25	178	85078-13	/6-013
30	213	85078-14	/6-014
35	248	85078-15	/6-015
40	287	85019-09	/5-009
40	283	85078-16	/6-016
45	318	85078-17	/6-017
50	357	85019-10	/5-010
50	353	85078-18	/6-018

1/ DESC drawing 85078 and MIL-D-83532/6 incorporate ECL

2/ Military specification PIN's supersede DESC drawings PIN's when a GPL source is available.

3/ Abbreviated PIN's shown for convenience See MIL-D-83532 for complete PIN format.

MIL-STD-1837B

TABLE 300.XIII. Programmable, 24-pin surface mount,
300 inch profile, ECL.

Delay per step (ns)	Total delay (ns)	DESC drawing PIN 80023-
0.5	7.5	01
1.0	15	02
2.0	30	03
3.0	45	04
4.0	60	05
5.0	75	06
6.0	90	07
8.0	120	08
10	150	09
12	180	10
15	225	11
20	300	12
25	375	13
30	450	14
35	525	15
40	600	16
45	675	17
50	750	18
60	900	19
80	1,200	20
100	1,500	21

MIL-STD-1837B

SECTION 400

DELAY LINES, PASSIVE (MIL-D-83531 and DESC drawings
84035, 85012, and 88013)

Dual-in-line package (DIP) 1/

Number pins	Number pins	Impedance (ohms)	Page	Table
Ten	14	50	400.2	400.I
Ten	14	100	400.3	400.II
Ten	14	200	400.5	400.III
Ten	14	360	400.6	400.IV
Ten	14	500	400.7	400.V
Ten	16	50	400.7	400.VI
Ten	16	100	400.8	400.VII
Ten	16	200	400.8	400.VIII
Ten	16	250	400.9	400.IX
Ten	16	300	400.9	400.X
Ten	16	400	400.10	400.XI
Ten	16	500	400.10	400.XII
Twenty	24	50	400.11	400.XIII
Twenty	24	100	400.11	400.XIV
Twenty	24	200	400.12	400.XV
Twenty	24	250	400.12	400.XVI
Twenty	24	500	400.13	400.XVII

Single-in-line package (SIP)

Impedance (ohms)	Page	Table
50	400.14	400.XVIII
100	"	"
200	"	"
300	"	"
500	"	"

1/ Previous editions of this standard referenced MIL-D-23859 for some DIP packages. MIL-D-23859 was replaced by MIL-D-83531 in March 1987.

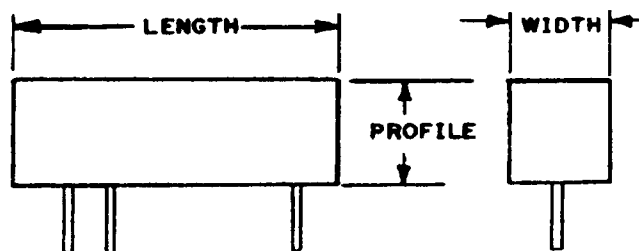
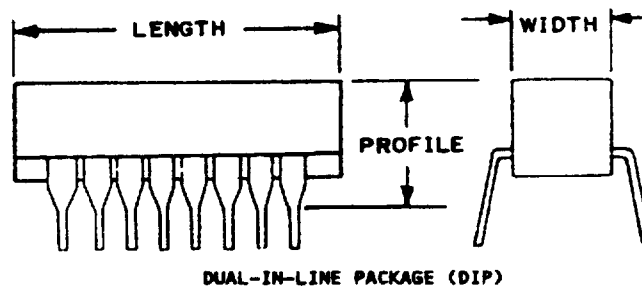


FIGURE 400.1 Delay lines, passive, package configurations

MIL-STD-1837B

TABLE 400 I. Ten taps, 14-pin DIP, 50 ohms impedance.

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	PIN M83531/D1-
5	.225	.780	.300	001
10	"	"	"	002
15	"	"	"	003
20	"	"	"	004
25	"	"	"	005
30	"	"	"	006
35	"	"	"	007
40	"	"	"	008
45	"	"	"	009
50	"	"	"	010
55	"	"	"	011
60	"	"	"	012
65	"	"	"	013
70	"	"	"	014
75	"	"	"	015
80	"	"	"	016
85	"	"	"	017
90	"	"	"	018
95	"	"	"	019
100	"	"	"	020
110	"	"	"	021
120	"	"	"	022
130	"	"	"	023
140	"	"	"	024
150	"	"	"	025
160	"	"	"	026
170	"	"	"	027
180	"	"	"	028
190	"	"	"	029
200	"	"	"	030
210	"	"	"	031
220	"	"	"	032
230	"	"	"	033
240	"	"	"	034
250	"	"	"	035
260	"	"	"	036
270	"	"	"	037
280	"	"	"	038
290	"	"	"	039
300	"	"	"	040
310	"	"	"	041
320	"	"	"	042
330	"	"	"	043

MIL-STD-1837B

TABLE 400.I. Ten taps, 14-pin DIP, 50 ohms impedance - Continued.

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	PIN M83531/01-
340	.225	.780	.300	044
350	"	"	"	045
360	"	"	"	046
370	"	"	"	047
380	"	"	"	048
390	"	"	"	049
400	"	"	"	050
410	"	"	"	051
420	"	"	"	052
430	"	"	"	053
440	"	"	"	054
450	"	"	"	055
460	"	"	"	056
470	"	"	"	057
480	"	"	"	058
490	"	"	"	059
500	"	"	"	060

TABLE 400.II Ten taps, 14-pin DIP, 100 ohms impedance.

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	PIN M83531/01-
5	225	780	.300	101
10	"	"	"	102
15	"	"	"	103
20	"	"	"	104
25	"	"	"	105
30	"	"	"	106
35	"	"	"	107
40	"	"	"	108
45	"	"	"	109
50	"	"	"	110
55	"	"	"	111
60	"	"	"	112
65	"	"	"	113
70	"	"	"	114
75	"	"	"	115
80	"	"	"	116
85	"	"	"	117
90	"	"	"	118
95	"	"	"	119
100	"	"	"	120
110	"	"	"	121
120	"	"	"	122
130	"	"	"	123
140	"	"	"	124
150	"	"	"	125
160	"	"	"	126

MIL-STD-1837B

TABLE 400.II. Ten taps, 14-pin DIP, 100 ohms impedance - Continued.

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	PIN M83531/01-
170	.225	.780	.300	127
180	"	"	"	128
190	"	"	"	129
200	"	"	"	130
210	"	"	"	131
220	"	"	"	132
230	"	"	"	133
240	"	"	"	134
250	"	"	"	135
260	"	"	"	136
270	"	"	"	137
280	"	"	"	138
290	"	"	"	139
300	"	"	"	140
310	"	"	"	141
320	"	"	"	142
330	"	"	"	143
340	"	"	"	144
350	"	"	"	145
360	"	"	"	146
370	"	"	"	147
380	"	"	"	148
390	"	"	"	149
400	"	"	"	150
410	"	"	"	151
420	"	"	"	152
430	"	"	"	153
440	"	"	"	154
450	"	"	"	155
460	"	"	"	156
470	"	"	"	157
480	"	"	"	158
490	"	"	"	159
500	"	"	"	160

MIL-STD-1837B

TABLE 400.III. Ten taps, 14-pin DIP, 200 ohms impedance.

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	PIN M83531/01-
5	.225	.780	.300	201
10	"	"	"	202
15	"	"	"	203
20	"	"	"	204
25	"	"	"	205
30	"	"	"	206
35	"	"	"	207
40	"	"	"	208
45	"	"	"	209
50	"	"	"	210
55	"	"	"	211
60	"	"	"	212
65	"	"	"	213
70	"	"	"	214
75	"	"	"	215
80	"	"	"	216
85	"	"	"	217
90	"	"	"	218
95	"	"	"	219
100	"	"	"	220
110	"	"	"	221
120	"	"	"	222
130	"	"	"	223
140	"	"	"	224
150	"	"	"	225
160	"	"	"	226
170	"	"	"	227
180	"	"	"	228
190	"	"	"	229
200	"	"	"	230
210	"	"	"	231
220	"	"	"	232
230	"	"	"	233
240	"	"	"	234
250	"	"	"	235
260	"	"	"	236
270	"	"	"	237
280	"	"	"	238
290	"	"	"	239
300	"	"	"	240
310	"	"	"	241
320	"	"	"	242
330	"	"	"	243
340	"	"	"	244
350	"	"	"	245
360	"	"	"	246
370	"	"	"	247
380	"	"	"	248
390	"	"	"	249
400	"	"	"	250

MIL-STD-1837B

TABLE 400.IV. Ten taps, 14-pin DIP, 360 ohms impedance.

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	PIN M83531/01-
5	.225	.780	.300	301
10	"	"	"	302
15	"	"	"	303
20	"	"	"	304
25	"	"	"	305
30	"	"	"	306
35	"	"	"	307
40	"	"	"	308
45	"	"	"	309
50	"	"	"	310
55	"	"	"	311
60	"	"	"	312
65	"	"	"	313
70	"	"	"	314
75	"	"	"	315
80	"	"	"	316
85	"	"	"	317
90	"	"	"	318
95	"	"	"	319
100	"	"	"	320
110	"	"	"	321
120	"	"	"	322
130	"	"	"	323
140	"	"	"	324
150	"	"	"	325
160	"	"	"	326
170	"	"	"	327
180	"	"	"	328
190	"	"	"	329
200	"	"	"	330
210	"	"	"	331
220	"	"	"	332

MIL-STD-1837B

TABLE 400.V. Ten taps, 14-pin DIP, 500 ohms impedance.

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	PIN M83531/01-
5	.225	.780	.300	401
10	"	"	"	402
15	"	"	"	403
20	"	"	"	404
25	"	"	"	405
30	"	"	"	406
35	"	"	"	407
40	"	"	"	408
45	"	"	"	409
50	"	"	"	410
55	"	"	"	411
60	"	"	"	412
65	"	"	"	413
70	"	"	"	414
75	"	"	"	415
80	"	"	"	416
85	"	"	"	417
90	"	"	"	418
95	"	"	"	419
100	"	"	"	420
110	"	"	"	421
120	"	"	"	422
130	"	"	"	423
140	"	"	"	424
150	"	"	"	425

TABLE 400.VI. Ten taps, 16-pin DIP, 50 ohms impedance.

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	DESC drawing PIN 84035-
20	.280	.880	.300	01
25	"	"	"	02
30	"	"	"	03
40	"	"	"	04
45	"	"	"	05
50	"	"	"	06
60	"	"	"	07
75	"	"	"	08
100	"	"	"	09

MIL-STD-1837B

TABLE 400.VII. Ten taps, 16-pin DIP, 100 ohms impedance

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	DESC drawing PIN 84035-
10	.280	.880	.300	10
20	"	"	"	11
30	"	"	"	12
40	"	"	"	13
50	"	"	"	14
60	"	"	"	15
80	"	"	"	16
90	"	"	"	17
100	"	"	"	18
120	"	"	"	19
150	"	"	"	20
200	"	"	"	21
250	"	"	"	22

TABLE 400.VIII. Ten taps, 16-pin DIP, 200 ohms impedance

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	DESC drawing PIN 84035-
20	.280	.880	.300	23
40	"	"	"	24
60	"	"	"	25
80	"	"	"	26
100	"	"	"	27
120	"	"	"	28
160	"	"	"	29
180	"	"	"	30
200	"	"	"	31
240	"	"	"	32
300	"	"	"	33
400	"	"	"	34

MIL-STD-1837B

TABLE 400.IX. Ten taps, 16-pin DIP, 250 ohms impedance. 1/

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	DESC drawing PIN 84035-	Military specification PIN M83531/02-
50	.280	.880	.300	35	001
75	"	"	"	36	002
100	"	"	"	37	003
125	"	"	"	38	004
150	"	"	"	39	005
200	"	"	"	40	006
225	"	"	"	41	007
300	"	"	"	42	008
375	"	"	"	43	009
500	"	"	"	44	010

1/ Military specification PIN's supersede DESC drawing PIN's when a qualified source is available.

TABLE 400.X Ten taps, 16-pin DIP, 300 ohms impedance. 1/

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	DESC drawing PIN 84035-	Military specification PIN M83531/02-
30	.280	.880	.300	45	011
60	"	"	"	46	012
90	"	"	"	47	013
125	"	"	"	48	014
150	"	"	"	49	015
180	"	"	"	50	016
240	"	"	"	51	017
270	"	"	"	52	018
360	"	"	"	53	019
450	"	"	"	54	020
600	"	"	"	55	021

1/ Military specification PIN's supersede DESC drawing PIN's when a qualified source is available.

MIL-STD-1837B

TABLE 400.XI. Ten taps, 16-pin DIP, 400 ohms impedance. 1/

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	DESC drawing PIN 84035-	Military specification PIN M83531/02-
40	.280	.880	.300	56	022
80	"	"	"	57	023
120	"	"	"	58	024
160	"	"	"	59	025
200	"	"	"	60	026
240	"	"	"	61	027
320	"	"	"	62	028
360	"	"	"	63	029
480	"	"	"	64	030
600	"	"	"	65	031
800	"	"	"	66	032

1/ Military specification PIN's supersede DESC drawing PIN's when a qualified source is available

FIGURE 400 XII. Ten taps, 16-pin DIP, 500 ohms impedance 1/

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	DESC drawing PIN 84035-	Military specification PIN M83531/02-
50	.280	.880	.300	67	N/A
100	"	"	"	68	N/A
150	"	"	"	69	N/A
200	"	"	"	70	033
250	"	"	"	71	034
300	"	"	"	72	035
400	"	"	"	73	036
450	"	"	"	74	037
500	"	"	"	75	038
600	"	"	"	76	039
750	"	"	"	77	040
1,000	"	"	"	78	041

1/ Military specification PIN's supersede DESC drawing PIN's when a qualified source is available

MIL-STD-1837B

TABLE 400.XIII. Twenty taps, 24-pin DIP, 50 ohms impedance. 1/

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	DESC drawing PIN 85012-	Military specification PIN M83531/03-
20	.300	1.300	.580	46	N/A
40	"	"	"	47	N/A
50	"	"	"	01	001
60	"	"	"	02	002
80	"	"	"	03	003
100	"	"	"	04	004
150	"	"	"	05	005
200	"	"	"	06	006

1/ Military specification PIN's supersede DESC drawing PIN's when a qualified source is available.

TABLE 400 XIV Twenty taps, 24-pin DIP, 100 ohms impedance 1/

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	DESC drawing PIN 85012-	Military specification PIN M83531/03-
20	.300	1.300	.580	48	N/A
40	"	"	"	49	N/A
50	"	"	"	07	007
60	"	"	"	08	008
80	"	"	"	09	009
100	"	"	"	10	010
150	"	"	"	11	011
200	"	"	"	12	012
300	"	"	"	13	013
400	"	"	"	14	014
500	"	"	"	45, 50	N/A
600	"	"	"	51	N/A
800	"	"	"	52	N/A
1,000	"	"	"	53	N/A
1,200	"	"	"	54	N/A
1,500	"	"	"	55	N/A

1/ Military specification PIN's supersede DESC drawing PIN's when a qualified source is available.

MIL-STD-1837B

TABLE 400.XV. Twenty taps, 24-pin DIP, 200 ohms impedance. 1/

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	DESC drawing PIN 85012-	Military specification PIN M83531/03-
40	.300	1.300	.580	15	015
60	"	"	"	56	N/A
80	"	"	"	16	016
100	"	"	"	57	N/A
120	"	"	"	17	017
200	"	"	"	18	018
300	"	"	"	19	019
400	"	"	"	20	020
500	"	"	"	21	021
600	"	"	"	22	022
800	"	"	"	23	023
1,000	"	"	"	58	N/A
1,200	"	"	"	59	N/A
1,500	"	"	"	60	N/A
2,000	"	"	"	61	N/A

1/ Military specification PIN's supersede DESC drawing PIN's when a qualified source is available.

TABLE 400.XVI Twenty taps, 24-pin DIP, 250 ohms impedance. 1/

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	DESC drawing PIN 85012-	Military specification PIN M83531/03-
50	.300	1.300	.580	24	024
100	"	"	"	25	025
150	"	"	"	26	026
200	"	"	"	27	027
250	"	"	"	28	028
300	"	"	"	29	029
400	"	"	"	30	030
500	"	"	"	31	031
600	"	"	"	32	032
800	"	"	"	33	033
1,000	"	"	"	34	034

1/ Military specification PIN's supersede DESC drawing PIN's when a qualified source is available.

MIL-STD-1837B

TABLE 400.XVII. Twenty taps, 24-pin DIP, 500 ohm impedance. ^{1/}

Total delay (ns)	Profile (inches)	Length (inches)	Width (inches)	DESC drawing PIN 85012-	Military specification PIN HE3531/03-
200	.300	1.300	.580	35	035
300	"	"	"	36	036
400	"	"	"	37	037
500	"	"	"	38	038
600	"	"	"	39	039
800	"	"	"	40	040
1,000	"	"	"	41	041
1,200	"	"	"	42	042
1,500	"	"	"	43	043
2,000	"	"	"	44	044
2,500	"	"	"	64	N/A

^{1/} Military specification PIN's supersede DESC drawing PIN's when a qualified source is available.

MIL-STD-1837B

TABLE 400.XVIII. Three-pin SIP.

Total delay (ns)	Characteristic impedance					Profile (inches)	Length (inches)	Width (inches)
	50Ω	100Ω	200Ω	300Ω	500Ω			
	PIN 88013-							
10	001	101	201	301	401	.250	.820	.250
20	002	102	202	302	402	"	"	"
30	003	103	203	303	403	"	"	"
40	004	104	204	304	404	"	"	"
50	005	105	205	305	405	"	"	"
60	006	106	206	306	406	"	"	"
70	007	107	207	307	407	"	"	"
80	008	108	208	308	408	"	"	"
90	009	109	209	309	409	"	"	"
100	010	110	210	310	410	"	"	"
125	011	111	211	311	411	"	"	"
150	012	112	212	312	412	"	"	"
175	013	113	213	313	413	"	"	"
200	014	114	214	314	414	"	"	"
225	015	115	215	315	415	"	"	"
250	016	116	216	316	416	"	"	"
275	017	117	217	317	417	"	"	"
300	018	118	218	318	418	"	"	"
325	019	119	219	319	419	"	"	"
350	020	120	220	320	420	"	"	"
375	021	121	221	321	421	"	"	"
400	022	122	222	322	422	"	"	"
425	023	123	223	323	423	"	"	"
450	024	124	224	324	424	"	"	"
475	025	125	225	325	425	"	"	"
500	026	126	226	326	426	"	"	"
550	027	127	227	327	427	"	"	"
600	028	128	228	328	428	"	"	"
650	029	129	229	329	429	"	"	"
700	030	130	230	330	430	"	"	"
750	031	131	231	331	431	"	"	"
800	032	132	232	332	432	"	"	"
850	033	133	233	333	433	"	"	"
900	034	134	234	334	434	"	"	"
950	035	135	235	335	435	"	"	"
1,000	036	136	236	336	436	"	"	"

MIL-STD-1837B

SECTION 500

HEAT SINKS

MIL-H-87111 and DESC drawing 85136

TO can	Page	Table
TO-3	500.2	500.I
TO-5	500.6	500.II
TO-6	500.7	500.III
TO-7	500.7	500.IV
TO-8	500.8	500.V
TO-9	500.8	500.VI
TO-11	500.9	500.VII
TO-18	500.9	500.VIII
TO-36	500.10	500.IX
TO-38	500.10	500.X
TO-42	500.11	500.XI
TO-53	500.11	500.XII
TO-58	500.11	500.XIII
TO-66	500.12	500.XIV
TO-92	500.14	500.XV
TO-99	500.15	500.XVI
TO-126	500.15	500.XVII
TO-220	500.16	500.XVIII
Stud	500.18	500.XIX
DIP	500.20	500.XX
Misc.	500.21	500.XXI

Fin stock configuration	Page	Figure
Straight fin with flat crest	500.22	500.1
Straight fin with rounded crest	500.23	500.2
Lanced offset with flat crest	500.24	500.3
Lanced offset with curved fin	500.27	500.4

MIL-STD-1837B

TABLE 500.1. Heat sinks, TO-3.

Configuration	Material	PIN M87111/ 1/
Wafer	Aluminum	01-1H01
"	"	01-1H02
"	"	01-1H03
"	"	01-1H04
"	"	01-1H05
"	"	01-1H06
"	Boron nitride filled	01-*Y35
"	silicone rubber or	01-*Y48
"	alumina filled	01-*Y49
"	silicone rubber	01-*Y50
"	"	01-*Y51
"	"	01-*Y52
"	"	01-*Y53
"	"	01-*Y54
"	"	01-*Y55
"	"	01-*Y56
"	"	01-*Y57
"	"	01-*Y58
"	"	01-*Y71
Formed	Aluminum	05-1*011
"	"	05-1*012
"	"	05-1*013
"	"	05-1*014
"	"	05-1*015
"	"	05-1*016
"	"	05-1*017
"	"	05-1*018
"	"	05-1*019
"	"	05-1*020
"	"	05-1*200
"	"	05-1*201
"	"	05-1*202
"	"	05-1*203
"	"	05-1*204
"	"	05-1*205
"	"	05-1*206
"	"	05-1*207
"	"	05-1*208
"	"	05-1*051
"	"	05-1*052
"	"	05-1*053
"	"	05-1*054
"	"	05-1*055
"	"	05-1*056
"	"	05-1*057
"	"	05-1*058
"	"	05-1*059
"	"	05-1*060
"	"	05-1*236
"	"	05-1*237
"	"	05-1*238

See footnote at end of table.

MIL-STD-1837B

TABLE 500.1. Heat sinks, TO-3 - Continued.

Configuration	Material	PIN M87111/ 1/
Formed	Aluminum	05-1*239
"	"	05-1*240
"	"	05-1*241
"	"	05-1*242
"	"	05-1*243
"	"	05-1*244
"	"	05-1*181
"	"	05-1*182
"	"	05-1*183
"	"	05-1*184
"	"	05-1*185
"	"	05-1*186
"	"	05-1*187
"	"	05-1*188
"	"	05-1*189
"	"	05-1*190
"	"	05-1*353
"	"	05-1*354
"	"	05-1*355
"	"	05-1*356
"	"	05-1*357
"	"	05-1*358
"	"	05-1*359
"	"	05-1*360
"	"	05-1*361
"	"	05-1*071
"	"	05-1*072
"	"	05-1*073
"	"	05-1*074
"	"	05-1*075
"	"	05-1*076
"	"	05-1*077
"	"	05-1*078
"	"	05-1*079
"	"	05-1*080
"	"	05-1*254
"	"	05-1*255
"	"	05-1*256
"	"	05-1*257
"	"	05-1*258
"	"	05-1*259
"	"	05-1*260
"	"	05-1*261
"	"	05-1*262
"	"	05-1*081
"	"	05-1*082
"	"	05-1*083
"	"	05-1*084

See footnote at end of table

MIL-STD-1837B

TABLE 500.1. Heat sinks, TO-3 - Continued.

Configuration	Material	PIN M87111/ 1/
Formed	Aluminum	05-1*085
"	"	05-1*086
"	"	05-1*087
"	"	05-1*088
"	"	05-1*089
"	"	05-1*090
"	"	05-1*263
"	"	05-1*264
"	"	05-1*265
"	"	05-1*266
"	"	05-1*267
"	"	05-1*268
"	"	05-1*269
"	"	05-1*270
"	"	05-1*271
"	"	05-1*111
"	"	05-1*112
"	"	05-1*113
"	"	05-1*114
"	"	05-1*115
"	"	05-1*116
"	"	05-1*117
"	"	05-1*118
"	"	05-1*119
"	"	05-1*120
"	"	05-1*290
"	"	05-1*291
"	"	05-1*292
"	"	05-1*293
"	"	05-1*294
"	"	05-1*295
"	"	05-1*296
"	"	05-1*297
"	"	05-1*298
"	"	05-1*171
"	"	05-1*172
"	"	05-1*173
"	"	05-1*174
"	"	05-1*175
"	"	05-1*176
"	"	05-1*177
"	"	05-1*178
"	"	05-1*179
"	"	05-1*180
"	"	05-1*344
"	"	05-1*345
"	"	05-1*346
"	"	05-1*347
"	"	05-1*348
"	"	05-1*349

See footnote at end of table

MIL-STD-1837B

TABLE 500.I. Heat sinks, TO-3 - Continued.

Configuration	Material	PIN MS7111/ <u>1/</u>
Formed	Aluminum	05-1*350
"	"	05-1*351
"	"	05-1*352
Extruded	"	06-1*08
"	"	06-1*09
"	"	06-1*10
"	"	06-1*11
"	"	06-1*12
"	"	06-1*13
"	"	06-1*14
"	"	06-1*36
"	"	06-1*37
"	"	06-1*38
"	"	06-1*39
"	"	06-1*40
"	"	06-1*41
"	"	06-1*42

1/ * indicates finish or material type.

MIL-STD-1837B

TABLE 500 II. Heat sinks, TO-5

Configuration	Material	PIN M87111/ 1/
Retainer clip	Beryllium copper	02-2*02
"	"	02-2*05
"	"	02-2*16
"	"	02-2*17
"	Epoxy	02-5*20
"	"	02-5*24
"	"	02-5*27
Press-on	Aluminum	03-1*16
"	"	03-1*18
"	"	03-1*20
"	"	03-1*27
"	"	03-1*31
"	"	03-1*32
"	"	03-1*33
"	"	03-1*36
"	"	03-1*38
"	"	03-1*40
"	"	03-1*41
"	"	03-1*42
"	"	03-1*43
"	"	03-1*44
"	"	03-1*45
"	"	03-1*46
"	Beryllium copper	03-2*03
"	"	03-2*04
"	"	03-2*07
"	"	03-2*08
"	"	03-2*11
"	"	03-2*12
Encapsulating	Aluminum	04-1*01
"	"	04-1*02
"	"	04-1*03
"	"	04-1*04
"	"	04-1*05
"	"	04-1*06
"	"	04-1*07
Dual link	Beryllium copper	08-2D01

1/ * indicates finish.

MIL-STD-18378

TABLE 500.III. Heat sinks, TO-6.

Configuration	Material	PIN MS7111/ 1/
Forced	Aluminum	05-1*001
"	"	05-1*002
"	"	05-1*003
"	"	05-1*004
"	"	05-1*005
"	"	05-1*006
"	"	05-1*007
"	"	05-1*008
"	"	05-1*009
"	"	05-1*010
"	"	05-1*191
"	"	05-1*192
"	"	05-1*193
"	"	05-1*194
"	"	05-1*195
"	"	05-1*196
"	"	05-1*197
"	"	05-1*198
"	"	05-1*199
Extruded	"	06-1*01
"	"	06-1*02
"	"	06-1*03
"	"	06-1*04
"	"	06-1*05
"	"	06-1*06
"	"	06-1*07

1/ * indicates finish.

TABLE 500.IV Heat sinks, TO-7.

Configuration	Material	PIN MS7111/ 1/
Press-on	Aluminum	03-1*28

1/ * indicates finish.

MIL-STD-1837B

TABLE 500.V. Heat sinks, TD-8.

Configuration	Material	PIN MS7111/ 1/
Wafer	Boron nitride filled silicone rubber or alumina filled silicone rubber	01-*Y38
Retainer clip	Beryllium copper	02-2*03
"	"	02-2*06
"	"	02-2*22
"	Epoxy	02-5*25
Press-on	Aluminum	03-1*47
"	Beryllium copper	03-2*09
"	"	03-2*13
"	"	03-2*48
Formed	Aluminum	05-1*061
"	"	05-1*062
"	"	05-1*063
"	"	05-1*064
"	"	05-1*065
"	"	05-1*066
"	"	05-1*067
"	"	05-1*068
"	"	05-1*069
"	"	05-1*070
"	"	05-1*245
"	"	05-1*246
"	"	05-1*247
"	"	05-1*248
"	"	05-1*249
"	"	05-1*250
"	"	05-1*251
"	"	05-1*252
"	"	05-1*253

1/ * indicates finish or material type.

TABLE 500.VI. Heat sinks, TD-9.

Configuration	Material	PIN MS7111/ 1/
Press-on	Aluminum	03-T*14
"	"	03-1*15
"	"	03-1*21
"	"	03-1*34
"	"	03-1*35

1/ * indicates finish.

MIL-STD-1837B

TABLE 500.VII. Heat sinks, TO-11.

Configuration	Material	PIN M87111/ 1/
Press-on	Aluminum	03-1*27
"	"	03-1*31
"	"	03-1*32
"	"	03-1*33
"	"	03-1*36
"	"	03-1*38

1/ * indicates finish.

TABLE 500.VIII Heat sinks, TO-18

Configuration	Material	PIN M87111/ 1/
Wafer	Boron nitride filled silicone rubber or alumina filled silicone rubber	01-*Y36
Retainer clip	Beryllium copper	02-2*01
"	"	02-2*04
"	"	02-2*21
"	"	02-2*28
"	"	02-2*29
"	Epoxy	02-5*18
"	"	02-5*19
"	"	02-5*23
"	"	02-5*26
Press-on	Aluminum	03-1*19
"	"	03-1*26
"	"	03-1*39
"	"	03-1*44
"	"	03-1*45
"	"	03-1*46
"	Beryllium copper	03-2*01
"	"	03-2*02
"	"	03-2*05
"	"	03-2*06
"	"	05-2*10
Dual link	"	06-2*02
Dual link	"	06-2*03

1/ * indicates finish or material type.

MIL-STD-1837B

TABLE 500.IX. Heat sinks, TO-36.

Configuration	Material	PIN M87111/ 1/
Wafer	Boron nitride filled silicone rubber or alumina filled silicone rubber	01-*Y39
Formed	Aluminum	05-1*001
"	"	05-1*002
"	"	05-1*003
"	"	05-1*004
"	"	05-1*005
"	"	05-1*006
"	"	05-1*007
"	"	05-1*008
"	"	05-1*009
"	"	05-1*010
"	"	05-1*191
"	"	05-1*192
"	"	05-1*193
"	"	05-1*194
"	"	05-1*195
"	"	05-1*196
"	"	05-1*197
"	"	05-1*198
"	"	05-1*199
Extruded	"	06-1*01
"	"	06-1*02
"	"	06-1*03
"	"	06-1*04
"	"	06-1*05
"	"	06-1*06
"	"	06-1*07

1/ * indicates finish or material type.

TABLE 500.X. Heat sinks, TO-38

Configuration	Material	PIN M87111/ 1/
Press-on	Aluminum	03-1*47
Press-on	Beryllium copper	03-2*48

1/ * indicates finish.

MIL-STD-1837B

TABLE 500.XI. Heat sinks, TO-42.

Configuration	Material	PIN M87111/ 1/
Press-on	Aluminum	03-1*24
Press-on	Aluminum	03-1*25

1/ * indicates finish.

TABLE 500.XII. Heat sinks, TO-53

Configuration	Material	PIN M87111/ 1/
Wafer	Boron nitride filled	01-*Y42
Wafer	silicone rubber or alumina filled	01-*Y43
	silicone rubber	

1/ * indicates material type

TABLE 500.XIII. Heat sinks, TO-58.

Configuration	Material	PIN M87111/ 1/
Press-on	Aluminum	03-1*23

1/ * indicates finish.

MIL-STD-1837B

TABLE 500.XIV. Heat sinks, TO-66

Configuration	Material	PIN M87111/ 1/
Wafer	Aluminum	01-1H07
"	"	01-1H08
"	"	01-1H09
"	"	01-1H10
Formed	Boron nitride filled	01-*Y44
"	silicone rubber or	01-*Y45
"	alumina filled	01-*Y46
"	silicone rubber	01-*Y47
"	Aluminum	05-1*011
"	"	05-1*012
"	"	05-1*013
"	"	05-1*014
"	"	05-1*015
"	"	05-1*016
"	"	05-1*017
"	"	05-1*018
"	"	05-1*019
"	"	05-1*020
"	"	05-1*200
"	"	05-1*201
"	"	05-1*202
"	"	05-1*203
"	"	05-1*204
"	"	05-1*205
"	"	05-1*206
"	"	05-1*207
"	"	05-1*208
"	"	05-1*091
"	"	05-1*092
"	"	05-1*093
"	"	05-1*094
"	"	05-1*095
"	"	05-1*096
"	"	05-1*097
"	"	05-1*098
"	"	05-1*099
"	"	05-1*100
"	"	05-1*272
"	"	05-1*273
"	"	05-1*274
"	"	05-1*275
"	"	05-1*276
"	"	05-1*277
"	"	05-1*278
"	"	05-1*279
"	"	05-1*280
"	"	05-1*121

See footnote at end of table.

MIL-STD-18378

TABLE 500.XIV. Heat sinks, TD-66 - Continued

Configuration	Material	PIN MS7111/ 1/
Formed	Aluminum	05-1*122
"	"	05-1*123
"	"	05-1*124
"	"	05-1*125
"	"	05-1*126
"	"	05-1*127
"	"	05-1*128
"	"	05-1*129
"	"	05-1*130
"	"	05-1*299
"	"	05-1*300
"	"	05-1*301
"	"	05-1*302
"	"	05-1*303
"	"	05-1*304
"	"	05-1*305
"	"	05-1*306
"	"	05-1*307
"	"	05-1*141
"	"	05-1*142
"	"	05-1*143
"	"	05-1*144
"	"	05-1*145
"	"	05-1*146
"	"	05-1*147
"	"	05-1*148
"	"	05-1*149
"	"	05-1*150
"	"	05-1*317
"	"	05-1*318
"	"	05-1*319
"	"	05-1*320
"	"	05-1*321
"	"	05-1*322
"	"	05-1*323
"	"	05-1*324
"	"	05-1*325
"	"	05-1*151
"	"	05-1*152
"	"	05-1*153
"	"	05-1*154
"	"	05-1*155
"	"	05-1*156
"	"	05-1*157
"	"	05-1*158
"	"	05-1*159
"	"	05-1*160
"	"	05-1*326
"	"	05-1*327

See footnote at end of table.

MIL-STD-1837B

TABLE 500.XIV. Heat sinks, TO-66 - Continued.

Configuration	Material	PIN M87111/ 1/
Formed	Aluminum	05-1*328
"	"	05-1*329
"	"	05-1*330
"	"	05-1*331
"	"	05-1*332
"	"	05-1*333
"	"	05-1*334
"	"	05-1*161
"	"	05-1*162
"	"	05-1*163
"	"	05-1*164
Extruded	"	05-1*165
"	"	05-1*166
"	"	05-1*167
"	"	05-1*168
"	"	05-1*169
"	"	05-1*170
"	"	05-1*335
"	"	05-1*336
"	"	05-1*337
"	"	05-1*338
"	"	05-1*339
"	"	05-1*340
"	"	05-1*341
"	"	05-1*342
"	"	05-1*343
"	"	06-1*08
"	"	06-1*09
"	"	06-1*10
"	"	06-1*11
"	"	06-1*12
"	"	06-1*13
"	"	06-1*14

1/ * indicates finish or material type.

TABLE 500.XV Heat sinks, TO-92.

Configuration	Material	PIN M87111/ 1/
Press-on	Aluminum	03-1*44
"	"	03-1*45
"	"	03-1*46

1/ * indicates finish

MIL-STD-1837B

TABLE 500.XVI. Heat sinks, TO-99

Configuration	Material	PIN MS7111/ 1/
Wafer	Boron nitride filled silicone rubber or alumina filled silicone rubber	01-*Y69

1/ * indicates material type.

TABLE 500.XVII. Heat sinks, TO-126.

Configuration	Material	PIN MS7111/ 1/
Formed	Aluminum	05-1*011
"	"	05-1*012
"	"	05-1*013
"	"	05-1*014
"	"	05-1*015
"	"	05-1*016
"	"	05-1*017
"	"	05-1*018
"	"	05-1*019
"	"	05-1*020
"	"	05-1*200
"	"	05-1*201
"	"	05-1*202
"	"	05-1*203
"	"	05-1*204
"	"	05-1*205
"	"	05-1*206
"	"	05-1*207
"	"	05-1*208
Extruded	"	06-1*08
"	"	06-1*09
"	"	06-1*10
"	"	06-1*11
"	"	06-1*12
"	"	06-1*13
"	"	06-1*14

1/ * indicates finish.

MIL-STD-1837B

TABLE 500.XVIII. Heat sinks, TO-220.

Configuration	Material	PIN MS7111/ 1/
Formed	Aluminum	05-1*011
"	"	05-1*012
"	"	05-1*013
"	"	05-1*014
"	"	05-1*015
"	"	05-1*016
"	"	05-1*017
"	"	05-1*018
"	"	05-1*019
"	"	05-1*020
"	"	05-1*200
"	"	05-1*201
"	"	05-1*202
"	"	05-1*203
"	"	05-1*204
"	"	05-1*205
"	"	05-1*206
"	"	05-1*207
"	"	05-1*208
"	"	05-1*101
"	"	05-1*102
"	"	05-1*103
"	"	05-1*104
"	"	05-1*105
"	"	05-1*106
"	"	05-1*107
"	"	05-1*108
"	"	05-1*109
"	"	05-1*110
"	"	05-1*281
"	"	05-1*282
"	"	05-1*283
"	"	05-1*284
"	"	05-1*285
"	"	05-1*286
"	"	05-1*287
"	"	05-1*288
"	"	05-1*289
"	"	05-1*131
"	"	05-1*132
"	"	05-1*133
"	"	05-1*134
"	"	05-1*135
"	"	05-1*136
"	"	05-1*137
"	"	05-1*138

See footnote at end of table

MIL-STD-1837B

TABLE 500.XVIII. Heat sinks, TO-220 - Continued.

Configuration	Material	PIN M87111/ 1/
Formed	Aluminum	05-1*139
"	"	05-1*140
"	"	05-1*308
"	"	05-1*309
"	"	05-1*310
"	"	05-1*311
"	"	05-1*312
"	"	05-1*313
"	"	05-1*314
"	"	05-1*315
"	"	05-1*316
"	"	06-1*08
"	"	06-1*09
"	"	06-1*10
"	"	06-1*11
"	"	06-1*12
"	"	06-1*13
"	"	06-1*14

1/ * indicates finish

MIL-STD-1837B

TABLE 500.XIX. Heat sinks, stud.

Configuration	Material	PIN M87111/ 1/
Wafer	Aluminum	01-1*11
"	"	01-1*12
"	"	01-1*13
"	"	01-1*14
"	Boron nitride filled	01-*Y63
"	silicone rubber or	01-*Y59
"	alumina filled	01-*Y61
"	silicone rubber	
Formed	Aluminum	05-1*021
"	"	05-1*022
"	"	05-1*023
"	"	05-1*024
"	"	05-1*025
"	"	05-1*026
"	"	05-1*027
"	"	05-1*028
"	"	05-1*029
"	"	05-1*030
"	"	05-1*209
"	"	05-1*210
"	"	05-1*211
"	"	05-1*212
"	"	05-1*213
"	"	05-1*214
"	"	05-1*215
"	"	05-1*216
"	"	05-1*217
"	"	05-1*031
"	"	05-1*032
"	"	05-1*033
"	"	05-1*034
"	"	05-1*035
"	"	05-1*036
"	"	05-1*037
"	"	05-1*038
"	"	05-1*039
"	"	05-1*040
"	"	05-1*218
"	"	05-1*219
"	"	05-1*220
"	"	05-1*221
"	"	05-1*222
"	"	05-1*223
"	"	05-1*224
"	"	05-1*225
"	"	05-1*226
"	"	05-1*041
"	"	05-1*042

See footnote at end of table

MIL-STD-1837B

TABLE 500.XIX. Heat sinks, stud - Continued.

Configuration	Material	PIN M87111/ 1/
Formed	Aluminum	05-1*043
"	"	05-1*044
"	"	05-1*045
"	"	05-1*046
"	"	05-1*047
"	"	05-1*048
"	"	05-1*049
"	"	05-1*050
"	"	05-1*227
"	"	05-1*228
"	"	05-1*229
"	"	05-1*230
"	"	05-1*231
"	"	05-1*232
"	"	05-1*233
"	"	05-1*234
"	"	05-1*235
Extruded	"	06-1*15
"	"	06-1*16
"	"	06-1*17
"	"	06-1*18
"	"	06-1*19
"	"	06-1*20
"	"	06-1*21
"	"	06-1*22
"	"	06-1*23
"	"	06-1*24
"	"	06-1*25
"	"	06-1*26
"	"	06-1*27
"	"	06-1*28
"	"	06-1*29
"	"	06-1*30
"	"	06-1*31
"	"	06-1*32
"	"	06-1*33
"	"	06-1*34
"	"	06-1*35

1/ * indicates finish or material type.

MIL-STD-1837B

TABLE 500.XX. Heat sinks, DIP.

Configuration	Material	PIN M87111/ 1/
DIP	Aluminum	07-1801
"	"	07-1802
"	"	07-1803
"	"	07-1*04
"	"	07-1*05
"	"	07-1*06
"	"	07-1*07
"	"	07-1*08
"	"	07-1809
"	"	07-1810
"	"	07-1811
"	"	07-1812
"	"	07-1813
"	"	07-1814
"	"	07-1815
"	"	07-1816
"	"	07-1817
"	"	07-1818
"	"	07-1819
"	"	07-1820
"	"	07-1*21
"	"	07-1822
"	"	07-1*23

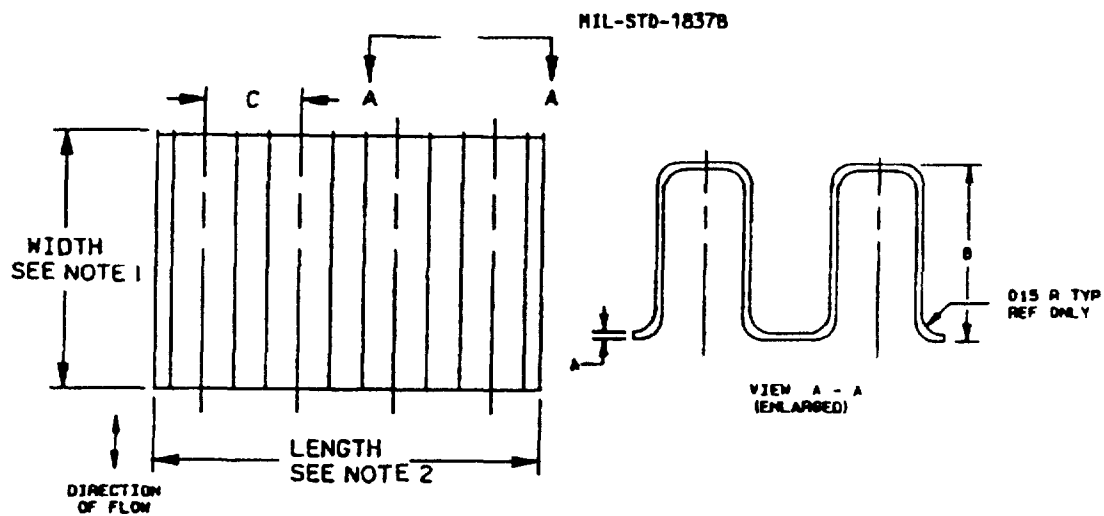
1/ * indicates finish

MIL-STD-1837B

TABLE 500.XXI. Heat sinks, misc.

Configuration	Material	PIN M87111/ 1/
Wafer	Aluminum	01-1*34
"	Boron nitride filled	01-*Y41
"	silicone rubber or	
"	alumina filled	01-*Y66
"	silicone rubber	01-*Y67
"	"	01-*Y70
Press-on	Aluminum	03-1*17
"	"	03-1*22
"	"	03-1*29
"	"	03-1*30
"	"	03-1*37
Formed	"	05-1*362
"	"	05-1*363
"	"	05-1*364
"	"	05-1*365
"	"	05-1*366
"	"	05-1*367
"	"	05-1*368
"	"	05-1*369
"	"	05-1*370
"	"	05-1*371
"	"	05-1*372
"	"	05-1*373
"	"	05-1*374
Extruded	"	06-1*43
"	"	06-1*44
"	"	06-1*45
"	"	06-1*46
"	"	06-1*47
"	"	06-1*48
"	"	06-1*49

1/ * indicates finish or material type.



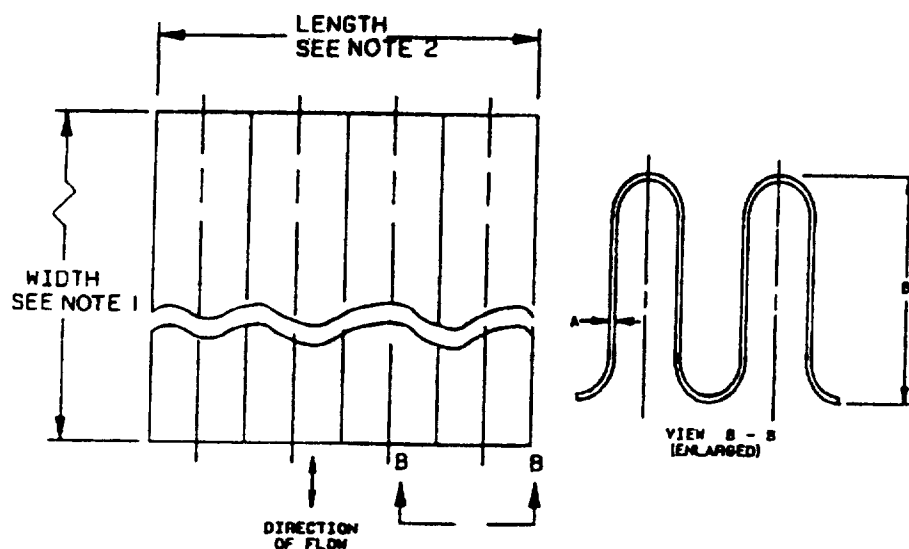
NOTES:

1. See DESC drawing 85136 for available widths
2. Length shall be as specified in the acquisition document

B-height (inches)	Number of fins per inch	A - material thickness (inches)	PIN 85136-
.100	8	.006	010
.100	10	.006	033
.100	12	.006	035
.100	14	.004	017
.150	12	.006	057
.230	8	.006	036
.250	12	.006	002
.250	18	.004	018
.250	20	.006	037
.300	14	.006	001
.312	15	.006	028
.375	12	.010	039
.375	14	.006	005
.375	18	.006	027
.500	12	.006	026
.625	5	.010	021

FIGURE 500.1 Heat sinks, fin stock, aluminum alloy, straight fin with flat crest (DESC drawing 85136)

MIL-STD-1837B



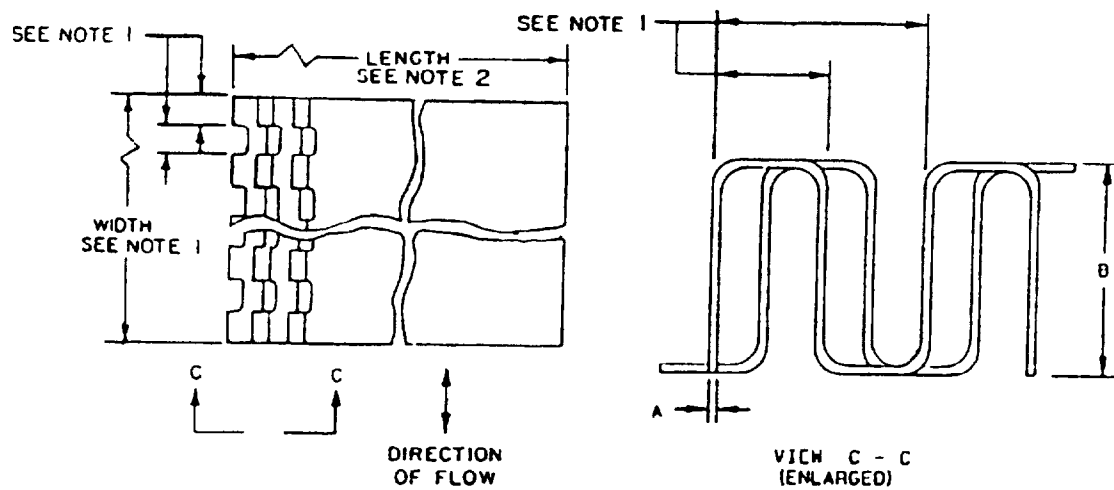
NOTES:

- 1 See DESC drawing 85136 for available widths.
- 2 Length shall be as specified in the acquisition document.

B-height (inches)	Number of fins per inch	A - material thickness (inches)	PIN 85136-
.112	15	.006	031
.250	12	.006	030
.250	18	.006	015
.375	18	.008	016
.500	14	.006	011
.500	20	.006	025
.625	15	.006	003

FIGURE 500.2. Heat sinks, fin stock, aluminum alloy, straight fin with rounded crest (DESC drawing 85136).

MIL-STD-1837B



NOTES:

1. See DESC drawing 85136 for this dimension
2. Length shall be as specified in the acquisition document.

FIGURE 500.3. Heat sinks, fin stock, aluminum alloy, lanced offset with flat crest (DESC drawing 85136).

MIL-STD-1837B

B-height (inches) 1/	Number of fins per inch 1/	A - material thickness (inches) 1/	PIN 85136-
.100	12	.005	041
.100	12	.006	040
.100	12	.006	043
.100	12	.006	009
.100	30	.006	038
.120	15	.006	024
.125	20	.006	034
.250	12	.006	013
.250	12	.006	054
.250	13	.006	022
.250	13	.006	045
.250	15	.006	008
.250	15	.006	052
.250	15	.006	053
.250	15	.006	055
.250	20	.006	047
.250	20	.006	048
.250	20	.006	051
.300	13	.006	032
.300	14	.006	029
.315	14	.006	007
.315	14	.006	044
.375	12	.006	014

See footnote at end of table.

FIGURE 500.3. Heat sinks, fin stock, aluminum alloy, lanced offset with flat crest (DESC drawing 85136) - Continued

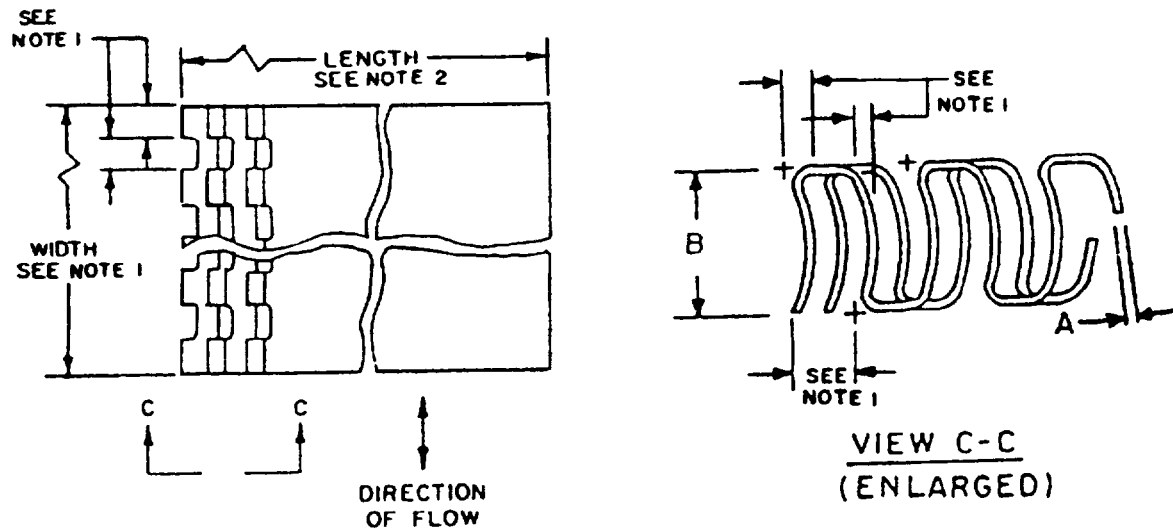
MIL-STD-1837B

B-height (inches) 1/	Number of fins per inch 1/	A - material thickness (inches) 1/	PIN 85136-
.375	15	.006	006
.375	15	.006	056
.375	15	.010	042
.375	18	.006	004
.375	20	.006	046
.375	20	.006	049
.500	12	.006	023
.500	12	.006	050
.500	18	.006	012

1/ Where data in first three columns are identical,
see 85136, table I, for additional dimensions

FIGURE 500.3. Heat sinks, fin stock, aluminum alloy, lanced offset
with flat crest (DESC drawing 85136) - Continued.

MIL-STD-1837B



NOTES:

1. See DESC drawing 85136 for this dimension
2. Length shall be as specified in the acquisition document.

B-height (inches)	Number of fins per inch	A - material thickness (inches)	PIN 85136-
.625	10	.004	020
.940	8	.004	019

FIGURE 500.4. Heat sinks, fin stock, aluminum alloy, lanced offset with curved fin (DESC drawing 85136)

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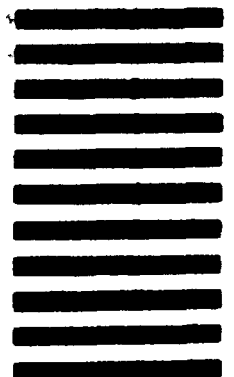
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