

**REVISIONS**

LTR	DESCRIPTION	DATE	APPROVED
A	Pages 1-6, Dimensioning requirements changed to allow second source to meet drawing requirements and thereby obtain two sources of supply for drawing.	14 JUN 1985	Ivan Jones
B	Added marking requirements. Editorial changes throughout.	29 SEP 1987	Randy Larson
C	Changed marking requirements and changed dimensional tolerance on snap retainer. Editorial changes.	19 SEP 1991	Randy Larson
D	Editorial changes throughout.	12 JUL 2000	Monica L. Poelking
E	Added additional source of supply.	22 NOV 2004	Thomas M. Hess
F	Updated sources of supply. Editorial and format changes throughout.	28 JAN 2015	Thomas M. Hess

CURRENT DESIGN ACTIVITY CAGE CODE 037Z3  
 DEFENSE LOGISTICS AGENCY  
 DLA LAND AND MARITIME,  
 COLUMBUS, OHIO 43218-3990



Prepared in accordance with ASME Y14.100

REV																			
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REV STATUS OF PAGES	REV	F	F	F	F	F	F												
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PMIC N/A	PREPARED BY Christopher Rauch						DESIGN ACTIVITY DEFENSE ELECTRONICS SUPPLY CENTER, DAYTON, OH 45444-5000												
Original date of drawing 8 August 1984	CHECKED BY Randy Larson						TITLE <b>HOLDER, ELECTRICAL CARD, CARD GUIDE, DEEP CHANNEL, PLASTIC</b>												
	APPROVED BY Ivan Jones																		
	SIZE <b>A</b>	CAGE CODE 14933						DWG. NO.						<b>84101</b>					
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1. SCOPE

1.1 Scope. This drawing describes the requirements for a family of deep channel card guides intended for use with circuit card assemblies and printed circuit boards.

1.2 Part or Identifying Number (PIN). The complete PIN shall be as follows:



2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements of documents cited in sections 3 and 4 of this specification, whether or not they are listed.

2.2 Government documents.

2.2.1 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 cited in the solicitation or contract (see 6.2).

DEPARTMENT OF DEFENSE STANDARDS

[MIL-STD-1285](#) – Marking of Electrical and Electronic Parts.

(Copies of these documents are available online at <http://quicksearch.dla.mil>.)

2.2 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents are those cited in the solicitation or contract (see 6.2).

ASTM INTERNATIONAL (ASTM)

ASTM D4066 – Standard Classification System for Nylon Injection and Extrusion Materials (PA).

(Copies of these documents are available online at <http://www.astm.org>.)

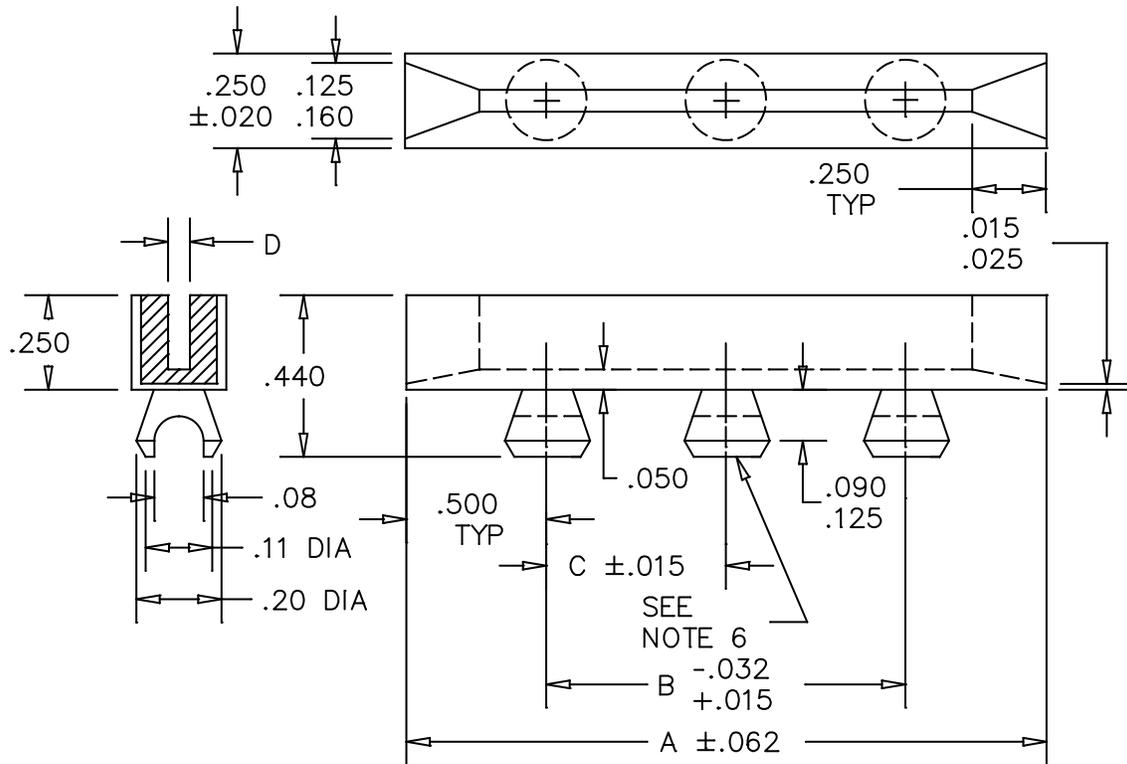
(Non-Government Standards and other publications are normally available from the organizations which prepare or which distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.3 Order of precedence. Unless otherwise noted herein or in the contract, 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.

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3. REQUIREMENTS

3.1 Interface and physical dimensions. The design, construction, and physical dimensions shall be as specified on [figure 1](#) and in [table I](#).



Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.010	.25	.025	.64	.062	1.58	.11	2.8	.250	6.35
.015	.38	.032	.81	.080	2.03	.125	3.18	.440	11.18
.020	.51	.050	1.27	.090	2.29	.160	4.06	.500	12.7

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ±.010 inch (0.25 mm).
4. The recommended thickness of the material to which the card guides are mounted is .047 to .090 inch (1.19 to 2.29 mm). The recommended hole diameter for the card guide feet is .187 + .003/-0.001 inch (4.75 + 0.08/-0.02 mm).
5. Slotting or elongating of second and third mounting holes is recommended to allow for length variations in molding and to facilitate assembly.
6. PIN's 84101-01, -02, -03, -22, and -23 have no center pylon, therefore, there is no "C" dimension for these parts.

FIGURE 1. Dimensions of deep channel card guides.

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TABLE I. Dimension of deep channel card guides. 1/

DESC PIN 8410	Dimension A ±.062 (1.57)	Dimension B +.000, -.032 (0.81)	Dimension C 2/ ±.015 (0.38)	Dimension D ±.005 (0.13)
-01	2.50 (63.5)	1.50 (38.1)	N/A 1/	.080 (2.03)
-02	4.50 (114.3)	3.50 (88.9)	N/A 1/	.080 (2.03)
-03	6.00 (152.4)	5.00 (127.0)	N/A 1/	.080 (2.03)
-04	8.00 (203.2)	7.00 (177.8)	3.50 (88.9)	.080 (2.03)
-22	4.50 (114.3)	3.50 (88.9)	N/A 1/	.132 (3.35)
-23	6.00 (152.4)	5.00 (127.0)	N/A 1/	.132 (3.35)
-24	8.00 (203.2)	7.00 (177.8)	3.50 (88.9)	.132 (3.35)

1/ Dimensions are in inches. Metric equivalents, in parentheses are given for general information only.

2/ PIN's 84101-01, -02, -03, -22, and -23 have no center pylon, therefore, "C" dimension is not applicable.

3.2 Material. Material shall be nylon in accordance with ASTM D4066.

3.3 Color. The color of the card guides shall be the natural color of nylon (cream) or black.

3.4 Certificate of compliance. A certificate of compliance shall be required from manufacturers requesting to be a approved source of supply in 6.5 herein. The certificate of compliance shall be submitted to DLA Land and Maritime, ATTN: VAC, P.O. Box 3990, Columbus, OH 43218-3990, prior to listing as an approved source of supply. It is prohibited for a manufacturer not listed in 6.5 to supply card guides to this drawing.

3.5 Marking. Marking of the card guide with the DESC PIN is not required. However, each unit package shall be marked in accordance with MIL-STD-1285 and include the PIN as specified herein (see 1.2), the manufacturer's name or Commercial and Government Entity (CAGE) code, and date lot codes.

3.6 Recycled, recovered, environmentally preferable, or biobased materials. Recycled, recovered, environmentally preferable, or biobased materials should be used to the maximum extent possible provided that the material meets or exceeds the operational and maintenance requirements, and promotes economically advantageous life cycle costs.

3.7 Workmanship. Card guides shall be free of flash, pits, voids, cracks, and excessive mold marks. A visible parting line shall be acceptable.

#### 4. VERIFICATION

##### 4.1 Conformance inspections.

4.1.1 Inspection of product for delivery. Inspection of product for delivery shall consist of visual and mechanical inspections of interface and physical dimensions (see 3.1), materials (see 3.2), and workmanship (see 3.7). Criteria for defects are listed in 4.1.5.

4.1.2 Optional statement of compliance. The acquiring activity, at its discretion, may accept a statement of compliance in lieu of the manufacturer performing the inspection of product for delivery (see 6.2.b).

4.1.3 Sampling plan. A sample of parts shall be randomly selected in accordance with table II, normal sampling. If one or more defects are found, the lot shall be rejected. Criteria for defects are listed in 4.1.5.

4.1.4 Rejected lots. If an inspection lot is rejected after normal sampling inspection, the manufacturer may rework it to correct the defects, or screen out the defective parts and resubmit for inspection. Resubmitted lots shall be inspected by selecting a random sample of parts in accordance with table III, tightened sampling. If one or more defects are found in this sample, the lot shall be rejected and shall not be supplied to this specification. Resubmitted lots which are acceptable shall be clearly identified as reinspected lots.

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TABLE II. Sampling plan.

Lot size	Normal	Tightened
2 to 25	3	5
26 to 50	5	6
51 to 90	6	7
91 to 150	7	11
151 to 280	10	13
281 to 500	11	16
501 to 1,200	15	19
1,201 to 3,200	18	23
3,201 to 10,000	22	29
10,001 to 35,001	29	35
35,001 and over	29	40

4.1.4 Rejected lots. If an inspection lot is rejected after normal sampling inspection, the manufacturer may rework it to correct the defects, or screen out the defective parts and resubmit for inspection. Resubmitted lots shall be inspected by selecting a random sample of parts in accordance with table II, tightened sampling. If one or more defects are found in this sample, the lot shall be rejected and shall not be supplied to this specification. Resubmitted lots which are acceptable shall be clearly identified as reinspected lots.

4.1.5 Defective characteristics and properties. Dimensional characteristics are considered defective when out of tolerance. Physical and functional properties are considered defective when outside the specified minimum, maximum, or range as applicable. Workmanship characteristics are considered defective when they would be detrimental to the intended use, performance requirements, or environmental survival of the part.

4.2 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use their own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth herein where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

## 5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of materiel is to be performed by DoD or in-house contractor personnel, these personnel need to contact the responsible packaging activity to ascertain packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's system command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

## 6. NOTES

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

6.1 Intended use. Card guides conforming to this drawing are intended for use when performance specifications do not exist and qualified military devices that will perform the required function are not available for OEM application.

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6.2 Acquisition requirements. The acquisition requirements should specify the following:

- a. Complete PIN (see 1.2).
- b. Requirements for delivery of one copy of the conformance inspection data or certificate of compliance that parts have passed conformance inspection with each shipment of parts by the manufacturer.
- c. Whether the manufacturer performs the product for delivery inspection (4.1.1) or provides an optional statement of compliance (4.1.2).
- d. Requirements for packaging and packing.

6.3 Replaceability. Card guides covered herein replace similar commercial devices covered by contractor-prepared specifications or drawings.

6.4 Users of record. Coordination of this document for future revisions are coordinated only with the approved sources of supply and the users of record of this document. Requests to be added as a recorded user of this drawing should be in writing to: DLA Land and Maritime, ATTN: VAC, Post Office Box 3990, Columbus, OH 43218-3990 or by electronic mail at "5998.Documents@dlamail" or by facsimile (614) 693-1642 or DSN 850-6939.

6.5 Approved sources of supply. Approved sources of supply are listed herein. Additional sources will be added as they become available. The vendors listed herein have agreed with this drawing and have submitted a certificate of compliance (see 3.4 herein) to DLA Land and Maritime, ATTN: VAC, P.O. Box 3990, Columbus, OH 43218-3990.

DESC drawing PIN (1)	Vendor similar designation or type number (2)	Vendor CAGE	Vendor name and address
84101-01	9425	67012	Global Supply LLC. 500 Division Street Campbell, CA 95008  Telephone: (408) 960-0370 Facsimile: (408) 978-4188  E-mail: <a href="mailto:sales@globalsupply.com">sales@globalsupply.com</a> URL: <a href="http://globalsupplyllc.com">globalsupplyllc.com</a>
84101-02	9445		
84101-03	9460		
84101-04	9480		
84101-22	9445-125		
84101-23	9460-125		
84101-24	9480-125		



- (1) Parts must be purchased to this DESC PIN to assure that all performance requirements and tests are met.
- (2) Do not use vendor PIN's for acquisition. Items acquired to this number may not satisfy the performance requirements of this drawing.

DESC drawing PIN (1)	Vendor similar designation or type number (2)	Vendor CAGE	Vendor name and address
84101-01	9425	24227	Teknational Division of Global Supply, LLC 500 Division Street Campbell, CA 95008-6906  Telephone: (408) 960-0370 Facsimile: (408) 978-4188  E-mail: <a href="mailto:sales@globalsupply.com">sales@globalsupply.com</a> URL: <a href="http://www.teknational.com">www.teknational.com</a>
84101-02	9445		
84101-03	9460		
84101-04	9480		
84101-22	9445-125		
84101-23	9460-125		
84101-24	9480-125		



- (1) Parts must be purchased to this DESC PIN to assure that all performance requirements and inspections are met.
- (2) Do not use vendor PIN's for acquisition. Items acquired to this number may not satisfy the performance requirements of this drawing.

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