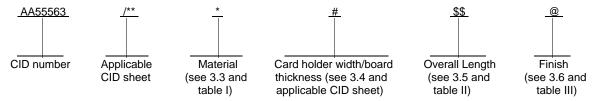
[INCH-POUND] A-A-55563 April 29, 1996

COMMERCIAL ITEM DESCRIPTION

HOLDERS, ELECTRICAL CARD, METAL CARD GUIDE, GENERAL REQUIREMENTS FOR

The General Services Administration has authorized the use of this commercial item description (CID) for all federal agencies.

- 1. SCOPE. This CID covers the general requirements for a family of metal card guides (here after referred to as card holders) intended for use to guide and hold circuit card assemblies into their installed positions. Items covered by this CID are intended for all federal agencies applications and environments.
- 2. CLASSIFICATION. The CID uses a classification system which is included in the Part Identification Number (PIN) as shown in the following example (see 7.1). The following part identification numbering procedure is for Government purposes and does not constitute a requirement for the contractor.



3. SALIENT CHARACTERISTICS.

- 3.1 <u>CID sheet</u>. The family of card holders intended for use on circuit card assemblies shall be in accordance with the requirements specified herein and the applicable CID sheet. In the event of conflict between this general CID and the applicable CID sheet, the latter shall govern.
- 3.2 <u>Design, construction, and physical dimensions</u>. Card holders shall be of the design, construction, and physical dimensions as specified on the applicable CID sheet.
- 3.3 <u>Material type</u>. Material type shall be as specified herein and the applicable CID sheet. When a definite material is not specified, a material shall be used which will enable the card holders to meet the performance requirements of this CID (see table I and the applicable CID sheet).

TABLE I. Card holder material.

Material designator	Material type	Applicable specification (or equivalent)	Paragraph
A	Beryllium copper 1/4 hard	ASTM B194, temper TD01	3.3.1
B	Beryllium copper 1/4 heat treated	ASTM B194, temper TH01	3.3.2
C	Steel	ASTM A682 or ASTM A684	3.3.3
D	Stainless steel 1/4 hard	AMS 5517, type 301	3.3.4

Beneficial comments, recommendations, additions, deletions, clarification, etc., and any data which may improve this document should be sent to: Defense Electronics Supply Center, ATTN: DESC-ELST, 1507 Wilmington Pike, Dayton, OH 45444-5764, or telephone (513) 296-6278, facsimile (513) 296-6870.

AMSC N/A

<u>DISTRIBUTION STATEMENT A</u>. Approved for public release; distribution is unlimited.

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- 3.3.1 <u>Beryllium copper 1/4 hard</u>. Beryllium copper 1/4 hard shall be as defined in ASTM B194, temper TD01, or equivalent. Beryllium copper 1/4 hard material type parts shall include a suffix "A" in the PIN (see section 2, table I, and the applicable CID sheet).
- 3.3.2 <u>Beryllium copper 1/4 heat treated (after forming)</u>. Beryllium copper 1/4 heat treated (after forming) shall be as defined in ASTM B194, temper TH01, or equivalent. Beryllium copper 1/4 heat treated material type parts shall include a suffix "B" in the PIN (see section 2, table I, and the CID sheet).
- 3.3.3 Steel. Steel shall be as defined in ASTM A682 or ASTM A684, or equivalent. Steel material type parts shall include a suffix "C" in the PIN (see section 2, table I, and the applicable CID sheet).
- 3.3.4 <u>Stainless steel 1/4 hard</u>. Stainless steel 1/4 hard shall be as defined in AMS 5517 or MIL-S-5059, type 301, or equivalent. Stainless steel 1/4 hard material type parts shall include a suffix "D" in the PIN (see section 2, table I, and the applicable CID sheet).
- 3.4 <u>Card holder width/board thickness</u>. Card holder width/board thickness shall be as specified in the applicable CID sheet. Card holder width/board thickness designator(s) A, B, C, or D from the applicable CID sheet shall be included in the PIN (see section 2, and the applicable CID sheet).
- 3.5 Overall length. Unless otherwise specified in the applicable CID sheet, overall length shall be as defined in table II. Overall length designator from table II shall be included in the PIN (see section 2, table II, and the applicable CID sheet).

Length designator	Card holder overall length Dimension L Inches (mm)
20	2.0 (50.80)
25	2.5 (63.50)
30	3.0 (76.20)
35	3.5 (88.90)
40	4.0 (101.60)
45	4.5 (114.30)
50	5.0 (127.00)
55	5.5 (139.70)
60	6.0 (152.40)
65	6.5 (165.10)
70	7.0 (177.80)
75	7.5 (190.50)

TABLE II. Card holder overall length.

- 3.6 <u>Finish</u>. Unless otherwise specified in the applicable CID sheet, finish shall be as defined in table III. Finish designator from table III shall be included in the PIN (see section 2, table III, and the applicable CID sheet).
- 3.6.1 <u>Cadmium plate</u>. Cadmium plate finish shall be as defined in QQ-P-416, type II, class 2, or equivalent with cadmium plate thickness to be .0003 inch minimum .0015 inch maximum (0.0076 mm 0.0381 mm). Cadmium plate finish parts shall include a suffix "A" in the PIN (see section 2, table III, and the applicable CID sheet).
- 3.6.2 <u>Cadmium plate clear chromate</u>. Cadmium plate clear chromate finish shall be as defined in QQ-P-416, type II, class 2, or equivalent with cadmium plate thickness to be .0003 inch minimum .0015 inch maximum (0.0076 mm 0.0381 mm). Cadmium plate clear chromate finish parts shall include a suffix "B" in the PIN (see section 2, table III, and the applicable CID sheet).
- 3.6.3 Copper plate. Copper plate finish shall be as defined in MIL-C-14550, class 2, or equivalent. Copper plate finish parts shall include a suffix "C" in the PIN (see section 2, table III, and the applicable CID sheet).
- 3.6.4 Ebonal black plate finish. Ebonal black plate finish parts shall include a suffix "D" in the PIN (see section 2, table III, and the applicable CID sheet).

TABLE III. Card holder finishes.

Finish designator <u>1</u> /	Finish	Applicable specification (or equivalent)	Paragraph
A B C D	Cadmium Cadmium clear chromate Copper Ebonal black (copper) Ebonal black (steel) Gold	QQ-P-416, type II, class 2 QQ-P-416, type II, class 2 MIL-C-14550, class 2 MIL-F-495 MIL-C-13924, class 1 MIL-G-45204, type I, class 1	3.6.1 3.6.2 3.6.3 3.6.4.1 3.6.4.2 3.6.5
F G H I J K	Nickel Passivated steel Silver Zinc Zinc yellow chromate No finish	QQ-N-290, class I, grade G, bright QQ-P-35, type VI or MIL-S-5002 QQ-S-365, type III, grade A ASTM B633, Fe/Zn 8 ASTM B633, Fe/Zn 8	3.6.6 3.6.7 3.6.8 3.6.9 3.6.10 3.6.11

- 1/ Finish designator "D" is use for Ebonal black (copper or steel) and depends upon the basic base material selected how that finish will be applied (see also the applicable CID sheet).
- 3.6.4.1 <u>Ebonal black (Copper) plate</u>. Ebonal black copper plate finish for 1/4 hard beryllium copper and 1/4 heat treated beryllium copper shall be as defined in MIL-F-495, or equivalent.
- 3.6.4.2 Ebonal black (Steel) plate. Ebonal black steel plate finish for steel and 1/4 hard steel shall be as defined in MIL-C-13924, class 1, or equivalent.
- 3.6.5 <u>Gold plate</u>. Gold plate finish shall be as defined in MIL-G-45204, type I, class 1, or equivalent. Gold plate finish parts shall include a suffix "E" in the PIN (see section 2, table III, and the applicable CID sheet).
- 3.6.6 <u>Nickel plate</u>. Nickel plate finish shall be as defined in QQ-N-290, class 1, grade G, bright, or equivalent. Nickel plate finish parts shall include a suffix "F" in the PIN (see section 2, table III, and the applicable CID sheet).
- 3.6.7 <u>Passivated steel plate</u>. Passivated steel plate finish shall be as defined in QQ-P-35, type VI, or MIL-S-5002, or equivalent. Passivated steel plate finish parts shall include a suffix "G" in the PIN (see section 2, table III, and the applicable CID sheet).
- 3.6.8 Silver plate. Silver plate finish shall be as defined in QQ-S-365, type III, grade A, or equivalent. Silver plate finish parts shall include a suffix "H" in the PIN (see section 2, table III, and the applicable CID sheet).
- 3.6.9 Zinc plate. Zinc plate finish shall be as defined in ASTM B633, Fe/Zn 8. Zinc plate finish parts shall include the suffix "I" in the PIN (see section 2, table III, and the applicable CID sheet).
- 3.6.10 Zinc yellow chromate plate. Zinc yellow chromate plate finish shall be as defined in ASTM B633, Fe/Zn 8. Zinc yellow chromate plate finish parts shall include the suffix "J" in the PIN (see section 2, table III, and the applicable CID sheet).
- 3.6.11 No finish. No finish option parts shall include the suffix "K" in the PIN (see section 2, table III, and the applicable CID sheet).
- 3.7 Marking. Card holders supplied to this CID shall be marked with the manufacturer's (MFG) standard commercial PIN.
- 3.8 <u>Workmanship</u>. Card holders shall be representative of controlled industrial techniques. Surfaces shall be free of pits in plating, voids, die marks, plating scratches, there shall be no base metal shavings, corrosion, or other defects which could affect the life, serviceability, or performance of the card holders. Identification grooves on surface of parts are acceptable.
- 4. REGULATORY REQUIREMENTS. This section is not applicable to this CID.

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5. QUALITY ASSURANCE PROVISIONS.

- 5.1 <u>Contractor certification</u>. The contractor shall certify and maintain substantiating evidence that the product offered meets the salient characteristics of this CID and of the applicable individual CID requirements, and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices, and is the same product offered for sale in the commercial marketplace. The Government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.
- 5.2 <u>Market acceptability</u>. The following market acceptability criteria are necessary to document the quality of the product to be provided under this CID:
 - a. The company producing the item must have been producing similar products meeting the requirements of this CID for a period of at least 2 years for the government or commercial users.

6. PACKAGING

- 6.1 Preservation, packing, and marking. Preservation, packing, and marking shall be as specified in the contract or order.
- 7. NOTES. This section contains relevant information which is useful to buyers, users, and suppliers in the process of acquiring the item, but is not mandatory.
- 7.1 <u>PIN</u>. The PIN should be used for Government purposes to buy commercial products to this CID. See section 2 for PIN format example.
- 7.2 <u>CAGE code</u>. For ordering purposes, inventory control, and submission of these card holders to DESC under the Military Parts Control Advisory Group (MPCAG) evaluation program, CAGE code 58536 should be used.

7.3 Source of documents.

7.3.1 <u>Government documents</u>. Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Defense Printing Service Detachment Office, Building 4D (Customer Service), 700 Robbins Avenue, Philadelphia, PA 19111-5094.

SPECIFICATION

FEDERAL

QQ-P-35 - Passivation Treatments for Corrosion-Resistant Steel.

QQ-N-290 - Nickel Plating (Electrodeposited).

QQ-S-365 - Silver Plating, Electrodeposited, General Specification For.

QQ-P-416 - Plating, Cadmium (Electrodeposited.

DEPARTMENT OF DEFENSE

MIL-F-495 - Finish, Chemical, Black, For Copper Alloys.

MIL-S-5002 - Surface Treatments And Inorganic Coatings For Metal Surfaces of Weapons Systems.

MIL-C-13924 - Coating, Oxide, Black For Ferrous Metals.

MIL-C-14550 - Copper Plating (Electrodeposited).
MIL-G-45204 - Gold Plating, Electrode Deposited.

7.4.2 Non-Government publications.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM B194 - Copper-Beryllium Alloy Plate, Sheet, Strip And Rolled Bar.
ASTM B633 - Zinc On Iron And Steel, Electrodeposited Coatings Of.

ASTM A682 - Standard Specification for Steel, Strip, High Carbon, Cold-Rolled.

ASTM A684 - Standard Specification for Steel, Strip, High Carbon, Spring Quality, General Requirements for.

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103-1187.)

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AEROSPACE MATERIAL SPECIFICATION (AMS)

AMS 5517 - Steel Corrosion Resistant, Sheet and Strip, 18Cr - 8Ni (SAE 30301) Cold Rolled, 125 ksi (862 MPa) Tensile Strength.

(Application for copies should be addressed to the Society of Automotive Engineers (SAE), 400 Commonwealth Drive, Warrendale, PA 15096-0001.)

- 7.5 Ordering data. The contract or order should specify the following:
 - a. CID sheet number, revision, and CID PIN.
 - b. Quality assurance provisions.
 - c. If a bid sample is required.
 - d. Packaging requirements, including pack quantity.
- 7.6 <u>Government users</u>. To acquire information on obtaining these card holders from the Government inventory system, contact Defense Electronics Supply Center, ATTN: DESC-EOA, 1507 Wilmington Pike, Dayton, OH 45444-5518, or telephone (513)296-8483.
- 7.7 <u>Comments</u>. Comments on this CID should be directed to Defense Electronics Supply Center, 1507 Wilmington Pike, ATTN: DESC-ELST, Dayton, OH 45444-5764; or by telephone (513) 296-6278 facsimile (513)296-6870.

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - 7FXE

PREPARING ACTIVITY

DLA - ES

Project 5998-D062