

COMMERCIAL ITEM DESCRIPTION

CONNECTORS, ELECTRICAL, IEEE 488 COMPATIBLE, RECTANGULAR, MINIATURE,
POLARIZED SHELL, 24 POSITION, BACK TO BACK INTERFACE BUS, CABLE
TERMINATING, INSULATION DISPLACEMENT, SCREW LOCKING.

The General Services Administration has authorized
the use of this Commercial Item Description (CID).

Abstract. This CID covers the general requirements for a polarized shell, 24 pin back to back electrical digital interface bus connector. This connector can be used in applications that require conformance to the IEEE 488 interface standard, and require termination of a discrete wire type cable.

Application. Connectors covered by this CID are intended for commercial/industrial applications and may be used in military systems where individual environmental and performance requirements can be met.

Part or Identifying Number (PIN). The PIN for the CID shall be as shown in the following example.



Salient characteristics.

Design, construction, and dimensions. Design construction and dimensions shall be as specified on figure 1 and in accordance with IEEE 488.

Contacts. The contacts are formed of a high conductive, high strength copper alloy with gold over nickel plating in the contact area.

Connector housings. Connector housings are moulded from black polyphenylene plastic material for high impact and dielectric strength.

Metric jackscrews. Metric jackscrews are made of black oxide plated carbon steel.

Termination wire range. Terminations are insulation displacement type which accommodate wire ranges of 26-27-28 AWG stranded (7 strand) wire.

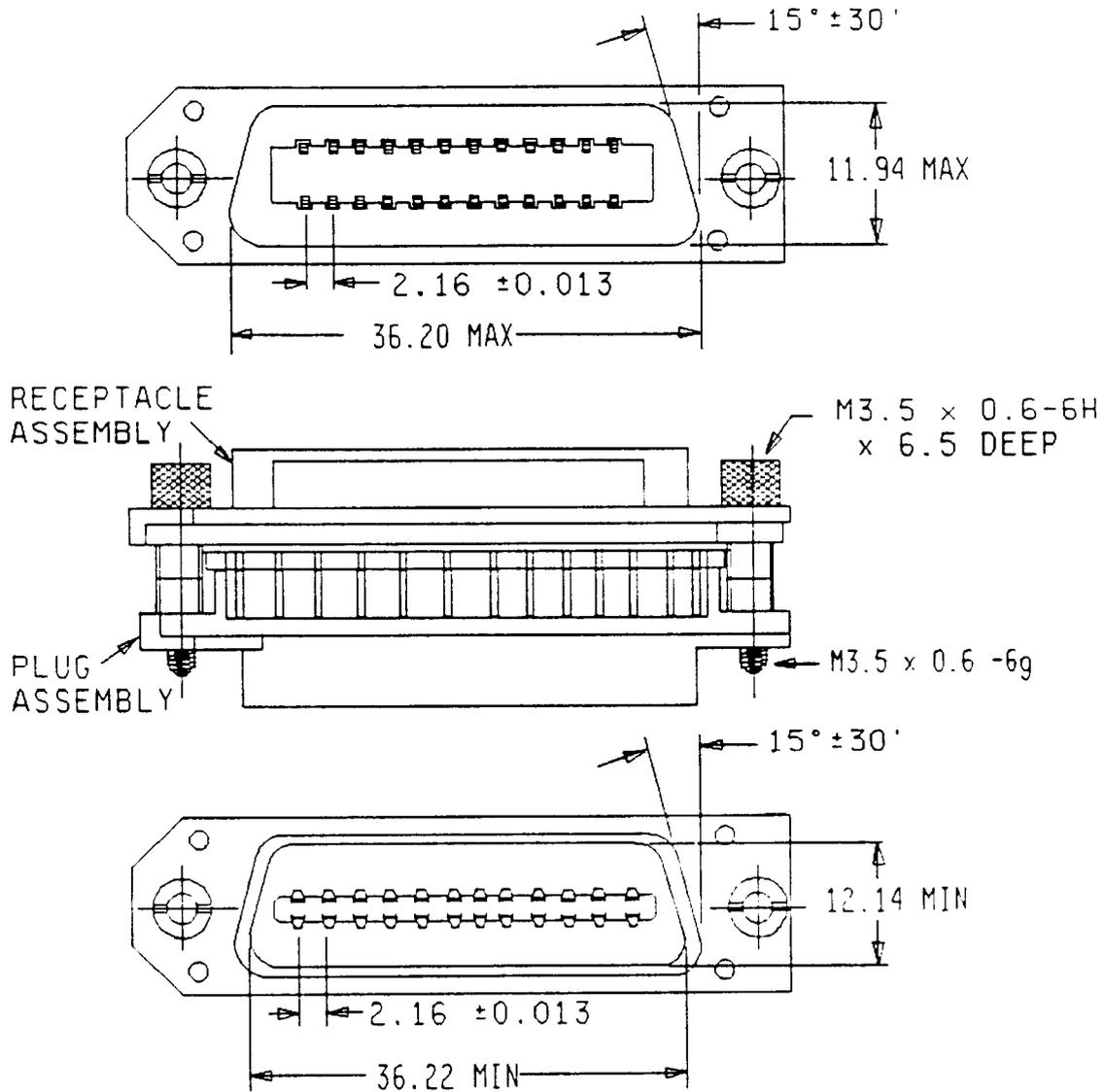
Contact rating. Contacts are rated at 5.0 amps minimum at 25°C.

Termination resistance. The contact resistance shall be 20 milliohms maximum initial.

Dielectric withstanding voltage. There shall be no breakdown of the insulating material when subjected to 1000 V ac for one minute between adjacent contacts of the mated connector assemblies.

Mating force. Connector mating force shall not exceed 4.64 newtons (1.04 pounds) maximum per contact.

Unmating force. Connector unmating force shall not exceed 0.46 newton (0.11 pound) minimum per contact.



NOTES:

1. Dimensions are in millimeters.
2. The US government preferred system of measurement is the metric SI system. However, since this item was originally designed using inch-pound units of measurement, in the event of conflict between the metric and inch-pound units, the inch-pound units shall take precedence.

mm	Inches
0.013	.0005
0.36	.0142
2.16	.085
4.88	.192
11.94	.470
12.14	.478
15.75	.620
36.20	1.425
36.22	1.426
46.79	1.842
55.25	2.175

Figure 1. Connector, 24 position, back to back interface bus.

Durability. Durability shall consist of 200 cycles of mating and unmating and upon completion the termination resistance shall not exceed a change greater than 35 milliohms maximum from initial resistance. There shall be no indication of physical damage.

Operating temperature. The operating temperature range shall be from -40°C to 75°C.

Vibration. The connector, or hardware when assembled to the connector, shall exhibit no evidence of breaking, cracking, or loosening of parts when subjected to vibration of 10-55-10 Hz traversed in 1 minute at 2 millimeters (.06 inch) total excursion for 2 hours in each of 3 mutually perpendicular planes.

Physical shock. The connector or hardware when assembled to the connector, shall exhibit no evidence of breaking, cracking, or loosening of parts when subjected to 50 G's half-sine wave shock of 11 milliseconds duration, 3 shocks in each direction applied along the 3 mutually perpendicular planes for a total of 18 shocks.

Regulatory requirements. This section is not applicable to this CID.

Quality assurance provisions.

Responsibility for inspection. The contractor is responsible for the performance of all inspection, examination and test requirements specified in the contract or purchase order. The contractor may use his or any other facilities suitable for inspection requirements specified in the contract or purchase order, unless otherwise disapproved by the procuring activity. The procurement activity reserves the right to perform any of the inspections set forth in the contract or purchase order where such inspections, examinations and tests are deemed necessary to assure supplies and services conform to prescribed requirements.

Contractor certification statement. The contractor shall certify and maintain objective quality evidence that the product offered meets the requirements of this CID and that the product conforms to the producers own drawings, specifications, standards, quality assurance practices, and is the same as the product provided as a bid sample. The procurement activity reserves the right to require proof of such conformance prior to the first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

Certificate of compliance. A certificate of compliance shall accompany all connectors supplied to this CID.

Packaging.

Preservation, packaging, packing, labeling, and marking. Preservation, packaging, labeling and marking shall be as specified in the contract or purchase order.

Notes. This section contains relevant information which is useful to buyers, users and suppliers in the process of procuring the item, but is not mandatory.

Referenced document.

Other Publication

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE 488 - IEEE Standard Digital Interface for Programmable Instrumentation.

(Applications for copies should be addressed to the Institute of Electrical and Electronics Engineers (IEEE), IEEE Service Center, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331.)

A-A-55148

Ordering data. Acquisition documents should specify the following:

- a. CID document number and revision and CID PIN.
- b. Quality assurance provisions.
- c. Packaging requirements.

Comments. Comments on this CID should be directed to Defense Electronics Supply Center, 1507 Wilmington Pike, ATTN: DESC-EMT, Dayton, OH 45444-5000, or telephone (513) 296-5391.

Sources of supply. A suggested source of supply is listed herein. Additional sources will be added as they become available.

TABLE 1. Suggested sources of supply.

CID PIN A-A-55148-	Vendor commercial PIN	Vendor CAGE number
01	554815-1	00779

Vendor CAGE
number

Vendor name
and address

00779

AMP, Incorporated
470 Friendship Road
Harrisburg, PA 17111-1203

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - 7FXE

PREPARING ACTIVITY:

DLA-ES

(Project 5935-D434)