INCH-POUND
A-A-59126B
28 March 2012
SUPERSEDING
A-A-59126A
31 May 2011

#### COMMERCIAL ITEM DESCRIPTION SHEET

# TERMINALS, FEEDTHRU (INSULATED) AND TERMINALS, STUD (INSULATED AND NONINSULATED)

The General Services Administration has authorized the use of this commercial item description (CID) as a replacement for MIL-T-55155 for all federal agencies.

## 1. SCOPE

- 1.1 <u>Scope</u>. This CID covers the requirements for insulated feedthru terminals and insulated and noninsulated stud terminals.
- 2. CLASSIFICATION. Items procured under this CID shall be identified by part numbers as follows:



- 2.1 <u>CID Sheet Identifier</u>. The CID sheet identifier shall consist of the number of the CID, a slash (/), and a two digit number denoting the CID sheet covering the item.
- 2.2 <u>Insulation Color</u>. The insulation color is indicated by a single digit in accordance with Table I. For noninsulated terminals or natural color (other than polytetrafluoroethylene) insulated terminals, the letter "X" shall be used in place of the single digit.
- 2.3 <u>Conductor Material and Finish</u>. The conductor material and finish is identified by a single letter (see 3.3.1). For example, "H" defines a brass terminal, tin-lead plated in accordance with SAE-AMS-P-81728, 0.0003 inch minimum thickness.
- 2.4 Item Number. The item number is indicated by a two-digit number.

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Table I. <u>Insulation color</u>.

| Symbol | Insulation Color |
|--------|------------------|
| 0      | Black            |
| 1      | Brown            |
| 2      | Red              |
| 3      | Orange           |
| 4      | Yellow           |
| 5      | Green            |
| 6      | Blue             |
| 7      | Violet           |
| 8      | Gray             |
| 9      | White            |

# 3. SALIENT CHARACTERISTICS

- 3.1 <u>CID Sheets</u>. The individual item requirements shall be as described herein and in accordance with the applicable CID sheet. In the event of any conflict between the requirements of this CID and the CID sheet, the latter shall govern.
- 3.2 <u>Materials</u>. Unless otherwise specified herein, materials shall conform to the manufacturer's specifications/standards. The use of recycled or reclaimed materials is acceptable provided that all requirement of this CID are met (see 4.1). Materials shall be fungus inert.
- 3.3 <u>Design and Construction</u>. The terminals shall conform to the manufacturer's design and construction. The dimensions shall be in accordance with the individual CID sheet.
- 3.3.1 <u>Conductor Material and Finish</u>. The conductor material and finish shall be in accordance with one of the following. When so constructed and finished, the terminals shall be solderable.
- 3.3.1.1 <u>Bronze</u>. The conductor material shall be bronze and finished with one of the following. Copper underplate is not required.
  - B Tin-lead plated in accordance with SAE-AMS-P-81728, 0.0003 inch minimum thickness
  - C Hot solder dipped using Sn60/Pb40 Solder per IPC J-STD-006, 0.0001 inch minimum thickness
  - D Tin-lead electrodeposited in accordance with ASTM B 545, 0.0003 inch minimum thickness. The minimum lead content shall be 3 percent.

- 3.3.1.2 <u>Brass</u>. The conductor material shall be brass and finished with one of the following. Copper underplate of 0.0001 inch minimum thickness is required.
  - H Tin-lead plated in accordance with SAE-AMS-P-81728, 0.0003 inch minimum thickness
  - I Hot solder dipped using Sn0/Pb40 Solder per IPC J-STD-006, 0.0001 inch minimum thickness
  - J Tin-lead electrodeposited in accordance with ASTM B 545, 0.0003 inch minimum thickness. The minimum lead content shall be 3 percent.
- 3.3.2 <u>Mounting Bases</u>. Mounting bases shall be constructed of brass and shall be plated with one of the following finishes (NOTE: Pure tin finish should not be used due to the potential for whiskering):
- (a) Tin-lead plated, 0.0001 inch minimum thickness provided that the minimum lead content is 3 percent.
- (b) Nickel plated in accordance with SAE-AMS-QQ-N-290, class I or II, 0.0001 inch minimum thickness.
- 3.3.3 <u>Mounting Hardware</u>. Mounting hardware shall have a finish that is electrolytically compatible with the finish on the mounting base to avoid dissimilar metal corrosion. Pure tin finish should not be used so as to avoid the potential for whiskering. Mounting hardware, including internal tooth lockwashers, shall be supplied with terminals.
- 3.3.4 <u>Insulation Colors</u>. Insulation colors shall be in accordance with Table I. Manufacturer's standard (equivalent) colors are acceptable.

## 3.4 Performance.

- 3.4.1 <u>Solderability</u>. When a tinned copper wire is wrapped around the terminal or run through the terminal (depending on the configuration of the terminal) the connection shall be easily solderable with a soldering iron and rosin-core solder. The soldered joint shall have a smooth fillet over 95 percent of the interface between the wire and the terminal with no visible voids or dewetting.
- 3.4.2 <u>Pull</u>. The insulated terminals when mounted and subjected to an axial pull as specified on the individual CID sheet for at least 30 seconds, shall show no evidence of separation of the conductor from the insulation, or mounting base by more than 0.005 inch or of terminals pulling out of the mounting.
- 3.4.3 <u>Torque</u>. The insulated terminals, when mounted and subjected to a torque as specified on the individual CID sheet for at least 30 seconds, shall show no evidence of turning of the conductor within the insulation, or mounting base, or of terminals turning within the mounting.

3.5 <u>Workmanship</u>. Terminals shall be processed in such a manner as to be uniform in quality and shall be free from any defects that affect life, serviceability or appearance.

# 4. REGULATORY REQUIREMENTS

4.1 <u>Recovered Materials</u>. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

# 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 Commercial Item Description, 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 (MA)</u>. The following market acceptability criteria are necessary to document the quality of the product to be provided under this CID.
- 5.2.1 The item offered must have been sold to the government or commercial market.

#### 6. PACKAGING

6.1 The packaging requirements shall be as specified in the contract or order (see 7.1),

# 7. NOTES

- 7.1 Ordering data. Acquisition documents must specify the following:
  - a. title, number, and date of this CID and the required slash sheet, and part number.
  - b. Packaging requirement (see 6.1).

MILITARY INTERESTS: CIVIL AGENCY COORDINATING ACTIVITY

Custodian: GSA-7FXE

Army - CR

Navy – EC
Air Force – 85

Preparing activity:
Army – CR

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