[METRIC]
A-A-55519/1B
April 26, 2004
SUPERSEDING
A-A-55519/1A
February 26, 1999

COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

FUSE, INCLOSED LINK, SUBMINIATURE, SURFACE MOUNT (SM), VERY FAST ACTING, WITH END CAPS

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

The complete requirements for procuring the surface mount, inclosed link fuse described herein shall consist of this document and the issue in effect of CID A-A-55519.

CLASSIFICATION/PART OR IDENTIFICATION NUMBER (PIN). This CID uses a classification system which is included in the Part Identification Number (PIN) as shown in the following example (see NOTES).

AA55519	/01	-	001
CID number	Applicable CID sheet (two digits)		Dash number (see table I)

SALIENT CHARACTERISTICS.

Interface and physical dimensions. Fuses supplied to this CID shall be as specified herein (see figure 1).

Electrical specification.

Voltage rating. The voltage rating for AA55519/01-01 through AA55519/01-16 fuses shall be 125 V ac and 125 V dc maximum. The voltage rating for AA55519/01-17 and AA55519/01-18 fuses shall be 65 V ac and 65 V dc.

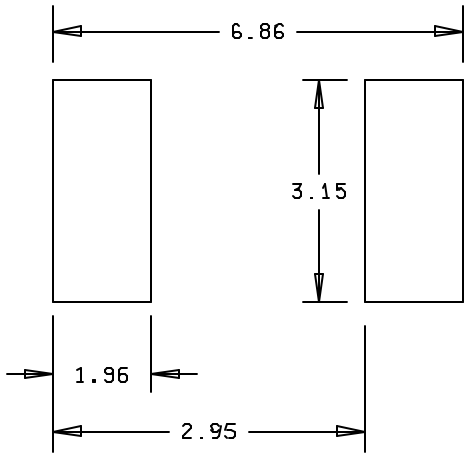
Interrupting ratings. The interrupting ratings shall be as indicated in table II.

Opening time characteristics. The opening time characteristics shall be as indicated in table III.

Environmental specifications. Fuses supplied to this CID shall be subject to the following tests and there shall be no electrical or mechanical damage to the fuse.

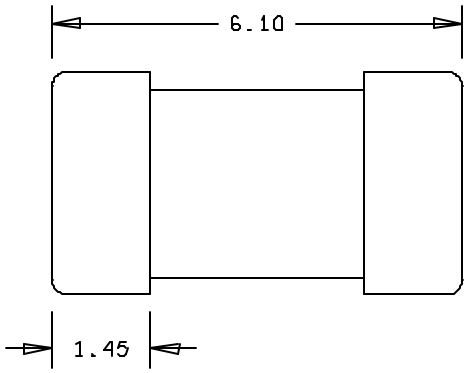
Operating temperature. The operating temperature shall be -55°C to +125°C.

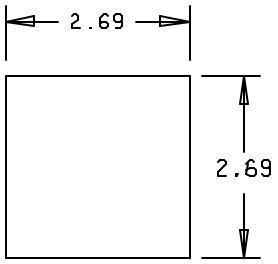
3.3.2 Shock. Fuses shall meet shock requirements in accordance with method 213, MIL-STD-202, test condition I (100 g's peak for 6 milliseconds).



RECOMMENDED PAD LAYOUT

mm	Inches
1.45	.057
1.96	.077
2.69	.105
3.15	.124
6.10	.240
6.86	.270





NOTES:

1. Dimensions are in millimeters.
2. Tolerance is ± 0.15 mm (0.006 inch), unless otherwise specified.
3. The US Government preferred system of measurement is the metric SI system. However, 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.

FIGURE 1. Configuration and dimensions.

TABLE I. Electrical characteristics

CID dash number AA55519/01-	Ampere rating	Nominal resistance cold ohms	Nominal melting I^2t A^2 second
001	.062	5.50	0.00019
002	.125	2.95	0.00286
003	.250	1.05	0.01126
004	.375	0.610	0.0425
005	.5	0.420	0.0795
006	.75	0.245	0.185
007	1.0	0.143	0.459
008	1.5	0.0630	0.853
009	2.0	0.0367	0.53
010	2.5	0.0286	1.029
011	3.0	0.0227	1.65
012	3.5	0.0200	2.469
013	4.0	0.0160	3.152
014	5.0	0.0125	5.566
015	7.0	0.0090	10.32
016	10.0	0.0056	26.46
017	12.0	0.0049	47.97
018	15.0	0.0037	97.82

TABLE II. Interrupting ratings.

Ampere (A) range	Interrupting rating
.0625A – 8A	50 ampere at 125 V ac/dc
12A - 15A	50 ampere at 65 V ac/dc
10A	50 ampere at 125 V dc 35 ampere at 125 V ac

Vibration. Fuses shall meet vibration requirements in accordance with method 201, MIL-STD-202, (10 Hz to 55 Hz, 1.52 mm (.060 inch) maximum total excursion).

Insulation resistance (after opening). The insulation resistance after opening shall be 10,000 ohms minimum at 100 volts in accordance with method 302, MIL-STD-202, test condition A.

Resistance to soldering heat. Fuses shall meet resistance to soldering heat requirements in accordance with method 210, MIL-STD-202, test condition B (10 seconds at 260°C).

Thermal shock. Fuses shall meet thermal shock requirements in accordance with method 107, MIL-STD-202, test condition B (-65°C to +125°C).

Moisture resistance. Fuses shall meet moisture resistance requirements in accordance with method 106, MIL-STD-202, with the exception of no load voltage during this test and step 7 shall not be performed.

Physical specifications.

Materials. Fuses shall have a ceramic body with tin-lead alloy plated brass caps.

Soldering parameters. Fuses shall be able to withstand, without electrical or mechanical damage to the fuse, a wave solder of +260°C (+500°F) for 10 seconds maximum, and an infrared solder of +260°C (+500°F) for 30 seconds maximum.

Solderability. Fuses shall meet solderability requirements in accordance with method 208 of MIL-STD-202.

Marking. Fuses supplied to this CID shall be marked with the manufacturer's standard commercial PIN.

TABLE III. Rating versus opening time.

Ampere rating	Percent of ampere rating	Opening time
.0625A - 15A	100 percent	4 hours, minimum
.0625A - 10A	200 percent	5 seconds, maximum
12A - 15A	200 percent	20 seconds, maximum

NOTES.

PIN. The PIN should be used for Government purposes to buy commercial products to this CID. See classification information for PIN format example.

Source of documents.

Department of Defense Standards

MIL-STD-202 - Test Method Standard Electronic and Electrical Component Parts.

Commercial Item Description

A-A-55519 - Fuse, Inclosed Link, Subminiature, Surface Mount (SM), General Requirement for.

(Copies of these documents are available online at http://assist.daps.dla.mil/quicksearch/ or www.dodssp.daps.mil or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

Commercial products. As part of the market analysis and research effort, this CID was coordinated with the following manufacturers of commercial products. At the time of CID preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID. (NOTE: This information should not be considered as a list of approved manufacturers or be used to restrict procurement to only the manufacturers shown.)

Manufacturer's CAGE	Manufacturer's name and address
75915	Littelfuse, Incorporated 800 E. Northwest Highway Des Plaines, IL 60016-3096 (847) 824-0400

Part number (P/N) supersession data. These CID PINs supersede the following MFR's P/N's as shown. This information is being provided to assist in reducing proliferation in the Government inventory system.

TABLE IV. P/N supersession data.

Dash number (see table I) AA55519/01-	MFR's CAGE	MFR's P/N 1/	Dash number (see table I) AA55519/01-	MFR's CAGE	MFR's P/N 1/
001	75915	451.062	010	75915	45102.5
002	75915	451.125	011	75915	451003
003	75915	451.250	012	75915	45103.5
004	75915	451.375	013	75915	451004
005	75915	451.500	014	75915	451005
006	75915	451.750	015	75915	451007
007	75915	451001	016	75915	451010
008	75915	45101.5	017	75915	451012
009	75915	451002	018	75915	451015

1/ The manufacturer's P/N shall not be used for procurement to the requirements of this CID. At the time of preparation of this CID, the aforementioned commercial products were reviewed and could be replaced by the CID P/N shown. For actual part marking requirements see the marking paragraph.

MILITARY INTEREST:

Custodian:
Navy - EC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - 7FXE

Preparing Activity:

DLA-CC

Project 5920-0831