

[METRIC]
A-A-55519/1C
9 January 2009

SUPERSEDING
A-A-55519/1B
26 April 2004

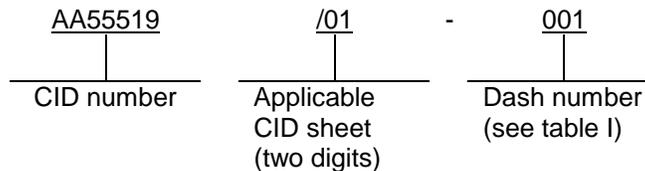
COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

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 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 [A-A-55519](#).

CLASSIFICATION/PART OR IDENTIFICATION NUMBER (PIN). This commercial item description (CID) specification sheet uses a classification system which is included in the PIN as shown in the following example (see NOTES).



SALIENT CHARACTERISTICS.

Interface and physical dimensions. Fuses supplied to this CID specification sheet 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.

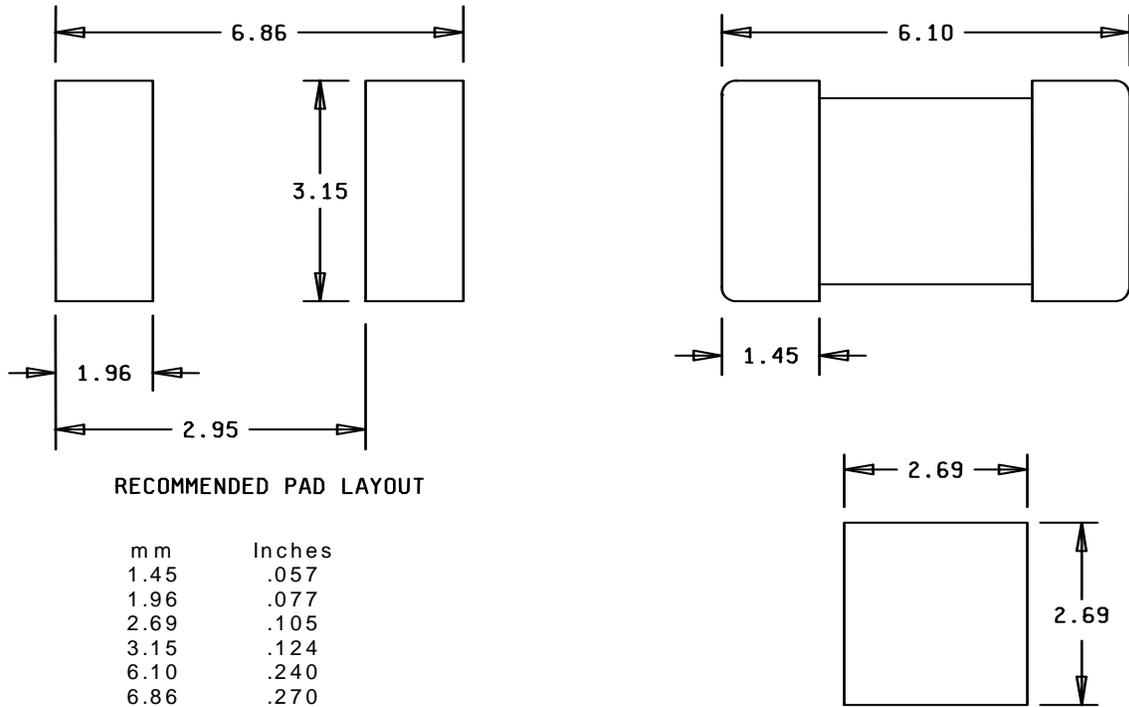
Interrupting ratings. The interrupting ratings shall be as indicated in table II.

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.

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



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.

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TABLE I. Electrical characteristics

CID dash number AA55519/01-	Ampere rating	Nominal resistance cold ohms	Nominal melting I ² t A ² second
001	.062	5.5000	0.00019
019	.080	4.0500	0.00033
020	.100	3.1000	0.00138
002	.125	1.7000	0.00286
021	.160	1.2157	0.0048
022	.200	0.8372	0.0089
003	.250	0.5765	0.0158
023	.315	0.3918	0.0311
004	.375	0.6100	0.0425
024	.400	0.5600	0.0484
005	.5	0.4200	0.0795
025	.630	0.3050	0.143
006	.75	0.2450	0.185
026	.800	0.2120	0.271
007	1.00	0.1530	0.459
027	1.25	0.0780	0.664
008	1.50	0.0630	0.853
028	1.60	0.0580	1.060
009	2.00	0.0367	0.530
010	2.50	0.0286	1.029
011	3.00	0.0227	1.650
029	3.15	0.0215	1.920
012	3.50	0.0200	2.469
013	4.00	0.0160	3.152
014	5.00	0.0125	5.566
030	6.30	0.0096	9.170
015	7.00	0.0090	10.32
031	8.00	0.0077	20.23
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 300 amperes @32Vdc
10A	35 amperes @125 Vac/ 50 amperes @125 Vdc 300 amperes @32 Vdc
12A 15A	50 ampere at 65Vac/Vdc 300 ampere @ 24Vdc

Vibration. Fuses shall meet vibration requirements in accordance with [method 201 of MIL-STD-202](#), 0.03 inches amplitude, 10 Hz to 55 Hz in 1 minute. 2 hours each XYZ=6 hours.

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

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

Thermal shock. Fuses shall meet thermal shock requirements in accordance with [method 107 of MIL-STD-202](#), test condition B, 5 cycles, -65°C to +125°C, 15 minutes @ each extreme.

Moisture resistance. Fuses shall meet moisture resistance requirements in accordance with [method 106 of MIL-STD-202](#), 10 cycles.

Salt spray. Fuses shall meet the salt spray requirements in accordance with method 101 of [MIL-STD-202, test condition B](#) (48 hours).

Physical specifications.

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

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](#).

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

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

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 STANDARD

[MIL-STD-202](#) - Test Method Standard Electronic and Electrical Component Parts.

FEDERAL SPECIFICATIONS

[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 <http://assist.daps.dla.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 specification sheet was coordinated with the following manufacturers of commercial products. At the time of CID specification sheet preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID specification sheet. (NOTE: This information should not be considered as a list of approved manufacturers or be used to restrict procurement to only the manufacturers shown.)

<u>MFR's CAGE</u>	<u>MFR's name and address</u>
75915	Littelfuse Incorporated 800 E. Northwest Highway Des Plaines, IL 60016-3096 Phone number (847) 824-1188 Facsimile number (847) 391-0894 E-mail: mailto:electronics@littelfuse.com URL: http://www.littelfuse.com

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Part number (P/N) supersession data. These CID specification sheet 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	017	75915	451012
002	75915	451.125	018	75915	451015
003	75915	451.250	019	75915	451.080
004	75915	451.375	020	75915	451.100
005	75915	451.500	021	75915	451.160
006	75915	451.750	022	75915	451.200
007	75915	451001	023	75915	451.315
008	75915	45101.5	024	75915	451.400
009	75915	451002	025	75915	451.630
010	75915	45102.5	026	75915	451.800
011	75915	451003	027	75915	4511.25
012	75915	45103.5	028	75915	45101.6
013	75915	451004	029	75915	4513.15
014	75915	451005	030	75915	45106.3
015	75915	451007	031	75915	451008
016	75915	451010			

^{1/} The manufacturer's P/N shall not be used for procurement to the requirements of this CID specification sheet. At the time of preparation of this CID specification sheet, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown. For actual part marking requirements, see the marking paragraph of [A-A-55519](#).

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National stock number (NSN). The following is a list of NSN's assigned which correspond to this CID specification sheet. The list is for information only and may not be indicative of all possible NSN's associated with the CID specification sheet. For up to date information on assigned NSN's, please contact the aforementioned DSCC office listed in [A-A-55519](#).

TABLE IV. NSN's.

Dash number (see table I) AA55519/01-	NSN	Dash number (see table I) AA55519/01-	NSN
001		017	N/A
002	N/A	018	N/A
003	N/A	019	N/A
004	N/A	020	N/A
005	N/A	021	N/A
006	N/A	022	N/A
007	N/A	023	N/A
008	N/A	024	N/A
009	5920-01-512-0047	025	N/A
010	N/A	026	N/A
011	N/A	027	N/A
012	N/A	028	N/A
013	N/A	029	N/A
014	N/A	030	N/A
015	N/A	031	N/A
016	N/A		

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

MILITARY INTERESTS:

Custodians:
Navy - EC
DLA - CC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - FSS

Preparing activity:

DLA-CC

Project 5920-2009-001

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://assist.daps.dla.mil>.