

[METRIC]
A-A-59688/3C
4 May 2009

SUPERSEDING
A-A-59688/3B
October 28, 2004

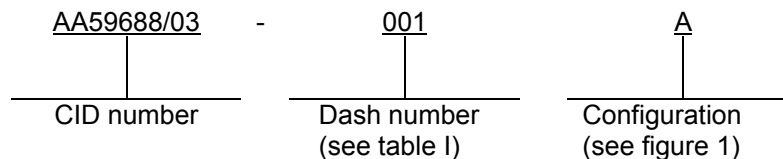
COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

FUSE, CARTRIDGE, INSTRUMENT TYPE, 5 MM X 20 MM,
TIME-DELAY, LOW-BREAKING CAPACITY

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

The complete requirements for procuring the fuses described herein shall consist of this document and the issue in effect of [A-A-59688](#).

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, and shall meet the requirements of [ANSI/IEC 60127-2](#), part 2 (see figure 1).

Case or body. The case or body shall be glass.

Ferrules. The materials for the ferrules shall be nickel or silver plated brass.

Mounting. Configuration A (ferrule type) is intended to be used with an applicable fuseholder or fuse clip. Configuration B (axial leads) is intended to be directly soldered onto a printed wiring board.

Current rating. The ampere rating shall be as specified in table I.

Voltage rating. The voltage rating shall be 250 V ac maximum.

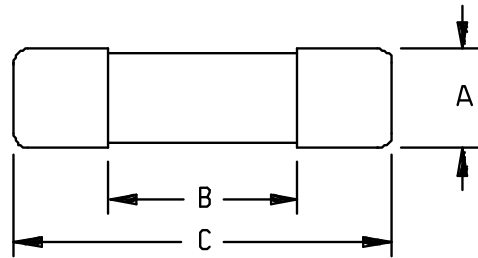
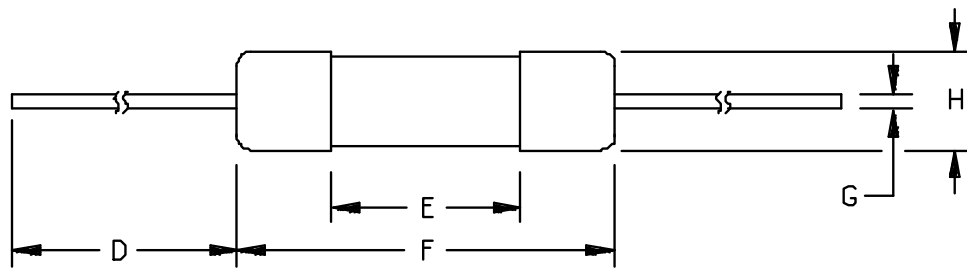
Voltage drop. Voltage drop shall be in accordance with table I.

Pre-arcing time/current characteristic. Pre-arcing time/current characteristic shall be as specified in table II.

Breaking capacity. The breaking capacity shall be 35 amperes maximum or 10 I_n, whichever is greater.

Endurance. Endurance shall be 100 cycles at 1.2 times the rated current followed by 1 hour at 1.5 times the rated current.

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CONFIGURATION ACONFIGURATION B

Ltr	mm		Inches	
	Min	Max	Min	Max
A	5.0	5.3	.20	.21
B	8.0	12.0	.31	.47
C	19.5	20.5	.77	.81
D	36.0	41.00	1.42	1.61
E	8.0	12.0	.31	.47
F	19.7	21.7	.78	.85
G	.62	.82	.02	.03
H	5.0	6.0	.20	.24

NOTES:

1. Dimensions are in millimeters.
2. Tolerance is ± 0.13 mm (.005 inch), unless otherwise specified.

FIGURE 1. Interface and physical dimensions.

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TABLE I. Characteristics.

CID dash number AA59688/03-	Configuration	Current rating (amperes)	Maximum voltage drop (mV)	Power dissipation (W) max.
001A	A	32 mA	5,000	1.6
001B	B			
002A	A	40 mA	4,000	
002B	B			
003A	A	50 mA	3,500	
003B	B			
004A	A	63 mA	3,000	
004B	B			
005A	A	80 mA	3,000	
005B	B			
006A	A	100 mA	2,500	
006B	B			
007A	A	125 mA	2,000	
007B	B			
008A	A	160 mA	1,900	
008B	B			
009A	A	200 mA	1,500	
009B	B			
010A	A	250 mA	1,300	
010B	B			
011A	A	315 mA	1,100	
011B	B			
012A	A	400 mA	1,000	
012B	B			
013A	A	500 mA	900	
013B	B			
014A	A	630 mA	300	
014B	B			
015A	A	800 mA	250	
015B	B			
016A	A	1 A	150	
016B	B			

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TABLE I. Characteristics - Continued.

CID dash number AA59688/03-	Configuration	Current rating (amperes)	Maximum voltage drop (mV)	Power dissipation (W) max.
017A	A	1.25 A	150	1.6
017B	B			
018A	A	1.6 A	150	
018B	B			
019A	A	2 A	150	
019B	B			
020A	A	2.5 A	120	
020B	B			
021A	A	3.15 A	100	
021B	B			
022A	A	4 A	100	
022B	B			
023A	A	5 A	100	
023B	B			
024A	A	6.3 A	100	
024B	B			

TABLE II. Pre-arcing time/current characteristic (+25°C ±10°C).

Rated current	Percent of current rating						
	210	275		400		1,000	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.
32 to 100 mA inclusive	2 min.	200 ms	10 s	40 ms	3 s	10 ms	300 ms
Above 100 mA to 6.3 A	2 min.	600 ms	10 s	150 ms	3 s	20 ms	300 ms

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NOTES.

PIN. The PIN should be used for Government purposes to buy commercial products to this CID specification sheet. See the classification section for PIN format example.

Source of document.

Other Publications

AMERICAN NATIONAL STANDARDS INSTITUTE/INTERNATIONAL ELECTROTECHNICAL COMMISSION (ANSI/IEC)

[ANSI/IEC 60127-2](#) - Miniature Fuses, Part 2: Cartridge Fuse-Links.

(Copies of this document are available online at <http://www.ansi.org/> or from the American National Standards Institute, 25 West 43rd Street, 4th Floor, New York, NY, 10036-7406.)

(Industry association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

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: electronics@littelfuse.com URL: www.littelfuse.com
92912	Bel Fuse Incorporated 206 Van Vorst Street Jersey City, NJ 07302-3096 Phone number (201) 432-0463 Facsimile number (201) 432-9542 E-mail: belfuse@belfuse.com URL: www.belfuse.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 III. P/N supersession data.

CID dash number AA59688/03- (see table I)	MFR's P/N <u>1/</u>		CID dash number AA59688/03- (see table I)	MFR's P/N <u>1/</u>	
	MFR CAGE 75915	MFR CAGE 92912		MFR CAGE 75915	MFR CAGE 92912
001A	218.032	N/A	013A	218.500	5ST500-R
001B	228.032	N/A	013B	228.500	5STP500-R
002A	218.040	N/A	014A	218.630	5ST630-R
002B	228.040	N/A	014B	228.630	5STP630-R
003A	218.050	N/A	015A	218.800	5ST800-R
003B	228.050	N/A	015B	228.800	5STP800-R
004A	218.063	5ST63-R	016A	218001	5ST1-R
004B	228.063	5STP63-R	016B	228001	5STP1-R
005A	218.080	5ST80-R	017A	2181.25	5ST1.25-R
005B	228.080	5STP80-R	017B	2281.25	5STP1.25-R
006A	218.100	5ST100-R	018A	21801.6	5ST1.6-R
006B	228.100	5STP100-R	018B	22801.6	5STP1.6-R
007A	218.125	5ST125-R	019A	218002	5ST2-R
007B	228.125	5STP125-R	019B	228002	5STP2-R
008A	218.160	5ST160-R	020A	21802.5	5ST2.5-R
008B	228.160	5STP160-R	020B	22802.5	5STP2.5-R
009A	218.200	5ST200-R	021A	2183.15	5ST3.15-R
009B	228.200	5STP200-R	021B	228.315	5STP3.15-R
010A	218.250	5ST250-R	022A	218004	5ST4-R
010B	228.250	5STP250-R	022B	228004	5STP4-R
011A	218.315	5ST315-R	023A	218005	5ST5-R
011B	228.315	5STP315-R	023B	228005	5STP5-R
012A	218.400	5ST400-R	024A	21806.3	5ST6.3-R
012B	228.400	5STP400-R	024B	22806.3	5STP6.3-R

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-59688](#).

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CID number supersession data. This CID supersedes Defense Supply Center, Columbus (DSCC) drawing [90032](#) and its dash numbers as shown.

TABLE IV. CID number supersession data.

CID dash number (see table I) AA59688/03-	Superseded DSCC drawing number 90032-	CID dash number (see table I) AA59688/03-	Superseded DSCC drawing number 90032-
001A	001A	013A	013A
001B	001B	013B	013B
002A	002A	014A	014A
002B	002B	014B	014B
003A	003A	015A	015A
003B	003B	015B	015B
004A	004A	016A	016A
004B	004B	016B	016B
005A	005A	017A	017A
005B	005B	017B	017B
006A	006A	018A	018A
006B	006B	018B	018B
007A	007A	019A	019A
007B	007B	019B	019B
008A	008A	020A	020A
008B	008B	020B	020B
009A	009A	021A	021A
009B	009B	021B	021B
010A	010A	022A	022A
010B	010B	022B	022B
011A	011A	023A	023A
011B	011B	023B	023B
012A	012A	024A	024A
012B	012B	024B	024B

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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-BBBBB.

TABLE V. NSN's.

Dash number (see table I) AA59688/03-	NSN	Dash number (see table I) AA59688/03-	NSN
001A	N/A	013A	N/A
001B	N/A	013B	N/A
002A	N/A	014A	N/A
002B	N/A	014B	N/A
003A	N/A	015A	5920-01-526-9246
003B	N/A	015B	N/A
004A	N/A	016A	N/A
004B	N/A	016B	N/A
005A	N/A	017A	N/A
005B	N/A	017B	N/A
006A	N/A	018A	N/A
006B	N/A	018B	N/A
007A	N/A	019A	N/A
007B	N/A	019B	N/A
008A	N/A	020A	N/A
008B	N/A	020B	N/A
009A	N/A	021A	5920-01-528-0638
009B	N/A	021B	N/A
010A	N/A	022A	N/A
010B	N/A	022B	N/A
011A	N/A	023A	N/A
011B	N/A	023B	N/A
012A	N/A	024A	N/A
012B	N/A	024B	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.

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MILITARY INTERESTS:

Custodians:
Navy - EC
DLA - CC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - FSS

Preparing activity:

DLA-CC

Project 5920-2009-046

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>.