



mm	Inches	mm	Inches
0.05	.002	3	.118
0.1	.004	3.1	.122
0.15	.006	4.3	.169
0.8	.031	5	.197
1.6	.063	5.8	.228
2.0	.079	6	.236
2.55	.100	7.4	.291
2.9	.114	12	.472

NOTES:

1. Dimensions are in millimeters.
2. Tolerance is ± 0.13 mm (.005 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.

AA59532/02-	Ampere rating	Breaking capacity	Voltage drop at rated current. typical mV	Power dissipation at rated current. typical watts	Fusing I^2t at 4 times rated current.	
					Typical A^2s	Maximum A^2s
001	63 m A	50A/ 63V ac/dc p.f./cos w 1	2550	0.2	0.00011	0.00064
002	100 m A		1770	0.2	0.0067	0.0016
003	125 m A		1770	0.2	0.0011	0.0025
004	160 m A		1700	0.3	0.0018	0.0041
005	250 m A		430	0.1	0.0045	0.01
006	350 m A		430	0.2	0.0084	0.02
007	375 m A		410	0.2	0.011	0.023
008	400 m A		360	0.2	0.0096	0.026
009	500 m A		350	0.2	0.016	0.04
010	630 m A		350	0.2	0.023	0.064
011	750 m A		300	0.2	0.052	0.09
012	1 A		220	0.2	0.086	0.16
013	1.25 A		220	0.3	0.14	0.25
014	1.5 A		200	0.3	0.24	0.36
015	1.6 A		200	0.3	0.27	0.41
016	2 A		200	0.4	0.44	0.64
017	2.5 A		190	0.5	0.79	1.0
018	3 A		190	0.6	1.1	1.4
019	3.15 A		190	0.6	1.1	1.6
020	3.5 A		140	0.5	1.6	2.0
021 <u>1/</u>	4 A		140 <u>1/</u>	0.6	2.1	2.6
022 <u>1/</u>	5 A		140 <u>1/</u>	0.7	2.9	4.0

1/ 3.5A maximum recommended rms current .5A possible at 12 V (trace width of test board outlined in IEC 127-4/9 is 10mm). Acceptability is determined in the end use application.

TABLE II. Opening time characteristics.

Rated current	100 percent of rated current	200 percent of rated current	400 percent of rated current
63 mA – 5A	≥ 4 hours	< 1 second	< 10 milliseconds
6.3A – 8A	≥ 4 hours	< 5 seconds	< 50 milliseconds
10A	≥ 4 hours	< 20 seconds	< 60 milliseconds

3.3.3 Vibration resistance. Fuses shall meet vibration requirements in accordance with IEC 68-2-6, Test Fc. (10-2000 Hz, cross-over frequency 60 Hz, resp. acceleration 100 m/s^2 (10g)).

3.3.4 Shock resistance. Fuses shall meet the shock requirements in accordance with IEC 68-2-27, test Ea (981 m/s^2 , 6ms).

3.3.5 Solderability (reflow and wave soldering). Fuses shall be able to withstand, without electrical or mechanical damage to the fuse, a wave or reflow solder of $+235^\circ\text{C}$ (455°F) for 2 seconds maximum in accordance with IEC 68-2-58 test Td.

3.3.6 Resistance to soldering heat. Fuses shall meet resistance to soldering heat requirements in accordance with IEC 68-2-58 test Td (10 seconds at 260°C (500 °F)).

3.4 Physical specifications.

3.4.1 Materials.

3.4.1.1 Housing material. The fuse and fuseholder shall be temperature resistance plastic with a UL 94VO flammability rating as a minimum.

3.4.1.2 Terminal plating. Terminals shall be tin-plated brass. Use of pure tin plating is prohibited as a final finish and as an undercoat. Use of tin-lead (Sn-Pb) finishes are acceptable provided that the minimum lead content is 3 percent.

3.5 Additional fuses and fuseholders. Fuses and fuseholders described in this CID may be supplied separately. Additional Fuses may be obtained under A-A-59532/1 and additional fuseholders may be obtained under A-A-59533.

3.6 Marking. Fuses and fuseholders supplied to this CID shall be marked with the manufacturer's (MFR) standard commercial PIN.

3.7 Recycled/recovered materials. 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).

4. REGULATORY REQUIREMENTS. This section is not applicable to this CID sheet.

5. QUALITY ASSURANCE PROVISIONS. Quality assurance provisions shall be as specified in A-A-59532.

6. PACKAGING. Packaging shall be as specified in A-A-59532. In addition, these fuse-fuseholder assemblies may be supplied individually or in a quantity of 1,500 on a 22.4 mm (.881 inches) wide tape reel in accordance with IEC 286-3.

7. NOTES.

7.1 PIN. The PIN should be used for Government purposes to buy commercial products to this CID. See section 2 for PIN format example.

7.2 Commercial and Government Entity (CAGE) code. For ordering purposes, inventory control, and submission of these fuses and fuseholders assemblies to DSCC under the Military Parts control Advisory Group (MPCAG) evaluation program, CAGE code 58536 should be used.

7.3 Source of documents.

Commercial Item Description

- A-A-59532 - Fuse, Inclosed Link, Surface Mount (SM), General Requirements for.
- A-A-59532/1 - Fuse, Inclosed Link, Surface Mount (SM), 63 Volts (V) AC/DC, Quick Acting.
- A-A-59533 - Fuseholder Block, 5 Ampere (A), 125 Volt (V) AC/DC, Surface Mount (SM), General Requirements for.

(Copies of commercial item descriptions are available from the Defense Printing Service Detachment Office, Building 4D (Customer Service), 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

Other Publications

INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)

- IEC-68-2-6 - Environmental Testing – Part 2: Tests – Test Fc: Vibration (Sinusoidal).
- IEC-68-2-27 - Environmental Testing – Part 2: Tests – Test Ea and Guidance: Shock.
- IEC-68-2-58 - Environmental Testing – Part 2-58: Tests – Test Td – Test Methods for Solderability, Resistance to Dissolution of Metallization and to Soldering Heat of Surface Mounting Devices (SMD).
- IEC-127-4 - Miniature Fuses – Part 4: Universal Modular Fuses – Links (UMF).
- IEC 286-3 - Packaging of Leadless Components on Continuous Tape.

(Applications for copies should be addressed to the International Electrotechnical Commission, 3 Rue De Varembe', PO Box 131, Geneve, Switzerland CH-1211.)

UNDERWRITERS LABORATORIES, INCORPORATED (UL)

- UL 94 - Safety Tests for Flammability of Plastic Materials for Parts in Devices and Appliances, Standard For.

(Applications for copies should be addressed to the Underwriters Laboratories, Incorporated, 333 Pfingsten Road, Northbrook, IL 60062-2096.)

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

7.4 Ordering data. Ordering data shall be as specified in A-A-59532.

7.5 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.)

<u>Manufacturer's CAGE</u>	<u>Manufacturer's name and address</u>
61935	Schurter, Incorporated 1016 Clegg Court Petaluma, CA 94954-1152 (707) 778-6311

7.6 Part number (P/N) supersession data. This CID supersedes the following manufacturers' P/N's as shown. This information is being provided to assist in reducing proliferation in the government inventory system.

TABLE II. P/N supersession data.

CID dash number (see table I)	MFR's CAGE	MFR's P/N ^{1/}	CID dash number (see table I)	MFR's CAGE	MFR's P/N ^{1/}
AA59532/02-			AA59532/02-		
001	61935	3422.0003.11	012	61935	3422.0009.11
002	61935	3422.0004.11	013	61935	3422.0010.11
003	61935	3422.0049.11	014	61935	3422.0047.11
004	61935	3422.0005.11	015	61935	3422.0011.11
005	61935	3422.0006.11	016	61935	3422.0012.11
006	61935	3422.0043.11	017	61935	3422.0013.11
007	61935	3422.0044.11	018	61935	3422.0014.11
008	61935	3422.0007.11	019	61935	3422.0048.11
009	61935	3422.0045.11	020	61935	3422.0015.11
010	61935	3422.0008.11	021	61935	3422.0016.11
011	61935	3422.0046.11	022	61935	3422.0017.11

^{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.

7.7 Government users. To acquire information on obtaining these fuse-fuseholder assemblies from the Government inventory system, contact Defense Supply Center, Columbus, ATTN: DSCC-CS, Post Office Box 3990, Columbus, OH 43216-5000, or telephone (614) 692-7790.

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - 7FXE

Preparing Activity:

DLA-CC

Project 5920-0617-02