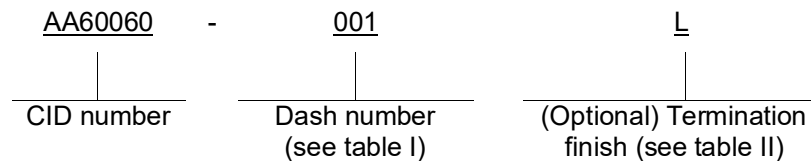


COMMERCIAL ITEM DESCRIPTION

INDUCTOR, POWER, HIGH CURRENT, SHIELDED, SURFACE MOUNT

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

1. **SCOPE.** This CID covers the general requirements for an Inductor. Inductors covered by this CID are intended for commercial/industrial applications.
2. **CLASSIFICATION/PART OR IDENTIFICATION NUMBER (PIN).** This CID uses a classification system which is included in the PIN as shown in the following example (see 7.1).



3. SALIENT CHARACTERISTICS.

3.1 Interface and physical dimensions. Inductors supplied to this CID shall be as specified herein. (see figure 1 and figure 2).

3.2 Core material. Iron.

3.3 Electrical characteristics. The electrical characteristics shall be as specified in table I.

3.4 Weight. 1.91g - 3.04 gram for -001 through -018. 2.73g - 5.12 gram for -019 through -042.

3.5 Ambient temperature. -40°C to +85°C with Irms current..

3.6 Maximum part temperature. The part may be operated without damage as long its temperature (ambient + self-heating) does not exceed +125°C.

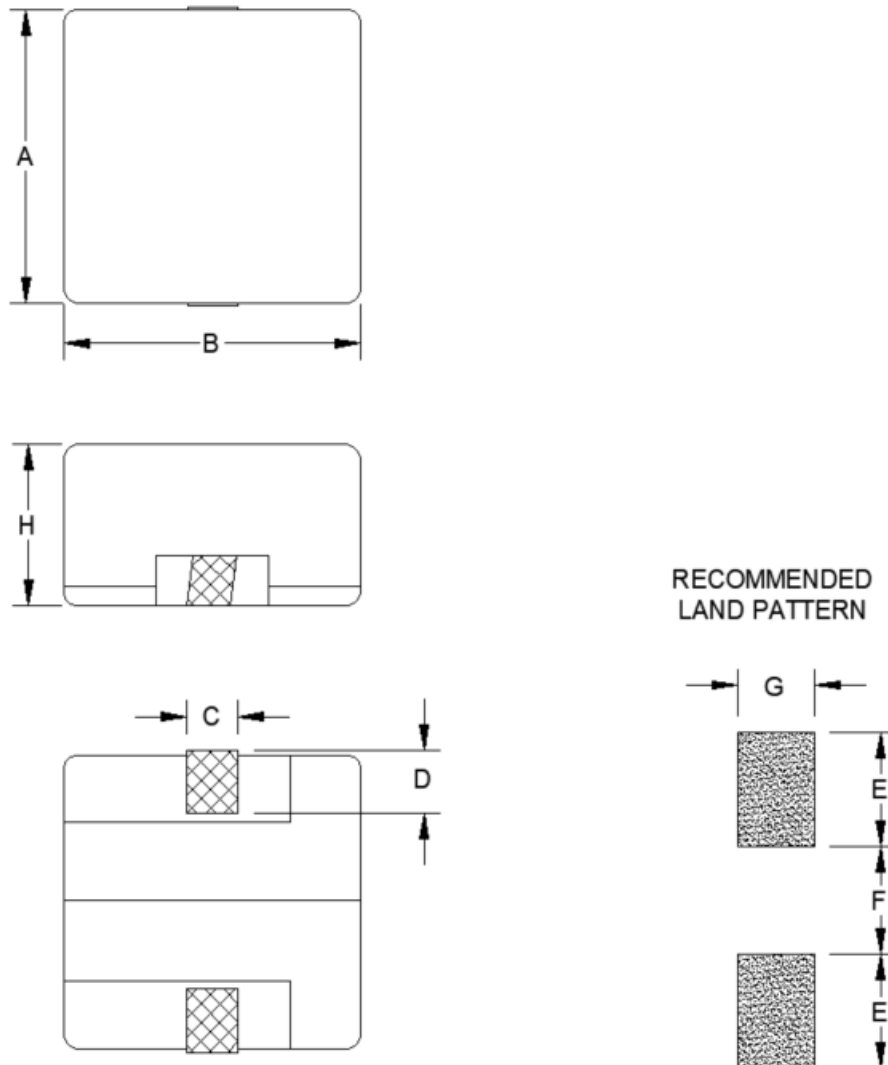
3.7 Marking. Inductors supplied to this CID shall be marked with the manufacturer's (MFR's) standard commercial PIN. (NOTE: The part number marked on the unit pack shall be the CID PIN.)

3.8 Pure tin. The use of pure tin, as an underplate or final finish is prohibited both internally and externally. Tin content of inductor components and solder shall not exceed 97 percent, by mass. Tin shall be alloyed with a minimum of 3 percent lead, by mass.

Beneficial comments recommendations, additions, deletions, clarifications, etc., and any data which may improve this document should be addressed to: DLA Land and Maritime, Columbus, ATTN: VAT, P.O. Box 3990, Columbus OH 43218-3990, or email (transformers@dla.mil). Since contact information can change you may want to verify the currency of the address information using the ASSIST Online database at <https://assist.dla.mil>.

3.9 Recycled, recovered, or environmentally preferable, or biobased materials. Recycled, recovered, or environmentally preferable, or biobased materials should be used to the maximum extent possible provided that the material meets or exceeds the operational and maintenance requirements, and promotes economically advantageous life cycle costs.

3.10 Workmanship. Inductors shall be processed in such a manner as to be uniform in quality and shall be free from other defects that will affect life, serviceability, or appearance.



AA60060-001 thru -018 10.5mm x 11.4 mm body size
 AA60060-019 thru -042 13.2 mm x 14.0 mm body size

FIGURE 1. Configuration A and dimensions.

A max	B max	C	D	E	F	G
0.441 (11.2)	0.413 (10.5)	0.071 (1.8)	0.091 (2.3)	0.157 (4.0)	0.157 (4.0)	0.106 (2.7)
0.441 (11.2)	0.413 (10.5)	0.071 (1.8)	0.091 (2.3)	0.157 (4.0)	0.157 (4.0)	0.106 (2.7)
0.441 (11.2)	0.413 (10.5)	0.071 (1.8)	0.091 (2.3)	0.157 (4.0)	0.157 (4.0)	0.106 (2.7)
0.449 (11.4)	0.413 (10.5)	0.071 (1.8)	0.091 (2.3)	0.157 (4.0)	0.157 (4.0)	0.106 (2.7)
0.449 (11.4)	0.413 (10.5)	0.071 (1.8)	0.091 (2.3)	0.157 (4.0)	0.157 (4.0)	0.106 (2.7)
0.449 (11.4)	0.413 (10.5)	0.071 (1.8)	0.091 (2.3)	0.157 (4.0)	0.157 (4.0)	0.106 (2.7)
0.543 (13.8)	0.520 (13.2)	0.094 (2.4)	0.118 (3.0)	0.197 (5.0)	0.213 (5.4)	0.134 (3.4)
0.543 (13.8)	0.520 (13.2)	0.094 (2.4)	0.118 (3.0)	0.197 (5.0)	0.213 (5.4)	0.134 (3.4)
0.543 (13.8)	0.520 (13.2)	0.094 (2.4)	0.118 (3.0)	0.197 (5.0)	0.213 (5.4)	0.134 (3.4)
0.543 (13.8)	0.520 (13.2)	0.094 (2.4)	0.118 (3.0)	0.197 (5.0)	0.213 (5.4)	0.134 (3.4)
0.551 (14.0)	0.520 (13.2)	0.094 (2.4)	0.118 (3.0)	0.197 (5.0)	0.213 (5.4)	0.134 (3.4)

NOTES:

1. Dimensions are in Inches.
2. Metric equivalents, in parenthesis, are listed for general information only.

FIGURE 1. Configuration A and dimensions – Continued.

TABLE I. Electrical characteristics.

CID dash number AA60060-	Inductance $\pm 20\%$ (μH)	DCR ($\text{m}\Omega$)		SRF typ (MHz)	Isat (A)		I _{rms} (A)		H Max (mm)
		Typ	Max		10% drop	20% drop	20% rise	40% rise	
-001	0.36	0.93	1.03	110	26.9	42.6	16.5	22.7	6.5
-002	0.40	0.93	1.03	110	21.0	35.2	16.3	21.9	6.1
-003	0.42	0.93	1.03	98	21.1	34.5	16.8	24.1	5.6
-004	0.45	1.73	1.91	100	16.5	24.9	12.8	19.8	4.1
-005	0.70	1.24	1.37	82	16.4	27.5	15.2	21.0	6.5
-006	0.80	2.35	2.59	89	13.3	21.7	12.4	17.3	5.1
-007	0.90	2.57	2.83	73	13.9	22.8	11.9	16.3	4.1
-008	1.20	2.38	2.62	72	14.0	23.3	12.3	17.6	6.1
-009	1.20	2.38	2.62	71	14.1	22.4	12.4	17.5	5.6
-010	1.30	2.38	2.62	61	10.8	17.7	11.7	16.5	5.3
-011	1.50	4.08	4.49	62	10.7	17.3	10.3	14.2	4.6
-012	1.75	2.84	3.13	70	12.1	19.2	10.9	15.3	6.1
-013	2.20	4.30	4.73	63	10.8	17.2	12.8	17.2	6.1
-014	3.30	5.10	5.60	52	8.80	14.4	12.6	16.7	6.1
-015	4.00	8.18	9.00	39	7.42	11.8	6.9	9.8	4.8
-016	4.70	8.97	9.67	38	8.20	13.4	8.8	12.2	6.1
-017	6.80	9.76	10.74	35	5.80	9.8	8.3	11.7	6.1
-018	8.20	10.68	11.75	28	5.20	9.0	7.9	10.8	6.1
-019	0.45	0.864	0.951	100	32.8	54.0	18.0	25.6	6.5
-020	0.50	0.864	0.951	110	21.3	38.1	18.6	26.9	6.5
-021	0.55	1.34	1.48	90	20.8	35.7	16.1	22.3	5.6
-022	0.80	1.20	1.32	89	27.4	47.4	17.4	24.6	6.5
-023	0.90	1.72	1.90	76	17.8	28.7	14.6	20.6	6.0
-024	1.0	3.46	3.81	77	13.6	21.2	11.5	16.7	3.9
-025	1.0	1.72	1.90	73	16.1	27.3	13.9	19.7	5.2
-026	1.4	2.20	2.42	65	18.9	30.1	13.7	19.9	6.5
-027	1.5	4.36	4.80	50	13.4	21.0	10.6	14.6	3.9
-028	2.0	3.47	3.82	55	15.2	24.2	11.6	16.3	6.5
-029	2.2	5.90	6.50	46	9.0	15.0	7.5	10.6	3.9
-030	2.5	3.43	3.74	45	10.9	17.7	11.5	15.8	5.2
-031	2.8	4.10	4.51	43	13.7	22.3	10.7	15.2	6.5

TABLE I. Electrical characteristics – continued.

CID dash number AA60060-	Inductance $\pm 20\%$ (μH)	DCR ($\text{m}\Omega$)		SRF typ (MHz)	Isat (A)		Irms (A)		Height Max (mm)
		Typ	Max		10% drop	20% drop	20% rise	40% rise	
-032	3.0	4.06	4.47	41	11.1	18.1	10.9	15.6	5.6
-033	3.3	8.80	9.68	40	7.40	12.2	5.95	9.86	3.9
-034	3.7	3.10	3.40	40	8.13	13.63	12.17	16.58	6.5
-035	4.5	7.13	7.85	34	7.12	11.8	8.43	11.7	5.2
-036	4.7	4.00	4.40	32	6.23	10.57	10.98	15.57	6.5
-037	6.0	5.50	6.05	26	5.60	9.57	9.27	13.62	6.5
-038	7.3	7.20	7.92	29	5.10	8.60	8.60	12.01	6.5
-039	9.2	9.70	10.60	26	4.57	7.80	7.19	10.18	6.5
-040	11.3	10.60	11.60	23	4.07	7.03	6.87	9.46	6.5
-041	13.0	12.57	13.75	21	3.93	6.70	6.12	8.65	6.5
-042	15.4	16.40	18.00	21	3.43	5.77	5.63	7.75	6.5

TABLE II. Termination finish.

Code	Termination finish
L	RoHS compliant, tin-silver over copper.
E	Halogen free component. RoHS compliant, tin-silver over copper.
T	RoHS tin-silver-copper (95.5/4/0.5) *Special order*
S	Non-RoHS tin-lead (63/37) *Special order*

4. **REGULATORY REQUIREMENTS.** 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. PRODUCT CONFORMANCE PROVISIONS

5.1 Product conformance. The products provided shall meet the salient characteristics of this CID, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial market. The Government reserves the right to require proof of such conformance.

6. **PACKAGING.** Preservation, packing, and marking shall be as specified in the contract or order.

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 inductors to DSCC under the Military Parts Control Advisory Group (MPCAG) evaluation program, CAGE code 58536 should be used.

7.3 Source of documents.

FEDERAL REGULATIONS

FAR - Federal Acquisition Regulations (FAR)

(Copies of these documents are available online at www.acquisition.gov/comp/far/index.html or from the U.S. Government Printing Office, 732 North Capital Street, NW, Washington D.C. 20401.)

7.4 Tin whisker growth. The use of alloys with tin content greater than 97 percent, by mass, may exhibit tin whisker growth problems after manufacture. Tin whiskers may occur anytime from a day to years after manufacture and can develop under typical operating conditions, on products that use such materials. Conformal coatings applied over top of a whisker-prone surface will not prevent the formation of tin whiskers. Alloys of 3 percent lead, by mass, have shown to inhibit the growth of tin whiskers. For additional information on this matter, refer to ASTM-B545 (Standard Specification for Electrodeposited Coatings of Tin).

7.5 Ordering data. The contract or order should specify the following:

- a. CID document number, revision, and CID PIN.
- b. Product conformance provisions.
- c. Packaging requirements.

7.6 Commercial products. As part of the market analysis and research effort, this CID was coordinated with the following manufacturer of commercial products. At the time of CID preparation and coordination, this manufacturer was 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 manufacturer shown.)

MFR's CAGE
02113

MFR's name and address
Coilcraft Inc
1102 Silver Lake Road
Cary, Illinois 60013-1658
Phone number (847) 639-2361
Uniform Resource Locator (URL): www.coilcraft.com

7.7 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 III. P/N supersession data. 1/

CID dash number (see table I) AA60060-	Vendor commercial PIN 2/ CAGE 99800
001*	MLC1265-361ML*
002*	MLC1260-401ML*
003*	MLC1255-421ML*
004*	MLC1240-451ML*
005*	MLC1265-701ML*
006*	MLC1250-801ML*
007*	MLC1240-901ML*
008*	MLC1260-122ML*
009*	MLC1255-122ML*
010*	MLC1250-132ML*
011*	MLC1245-152ML*
012*	MLC1260-172ML*
013*	MLC1260-222ML*
014*	MLC1260-332ML*
015*	MLC1245-402ML*
016*	MLC1260-472ML*
017*	MLC1260-682ML*
018*	MLC1260-822ML*
019*	MLC1565-451ML*
020*	MLC1565-501ML*
021*	MLC1555-551ML*
022*	MLC1565-801ML*
023*	MLC1560-901ML*
024*	MLC1538-102ML*
025*	MLC1550-102ML*
026*	MLC1565-142ML*
027*	MLC1538-152ML*
028*	MLC1565-202ML*
029*	MLC1538-222ML*
030*	MLC1550-252ML*
031*	MLC1565-282ML*
032*	MLC1555-302ML*
033*	MLC1538-332ML*
034*	MLC1565-372ML*
035*	MLC1550-452ML*
036*	MLC1565-472ML*
037*	MLC1565-602ML*
038*	MLC1565-732ML*
039*	MLC1565-922ML*
040*	MLC1565-113ML*
041*	MLC1565-133ML*
042*	MLC1565-153ML*

- 1/ When "*" is used for coded values, it's the contractors responsibility to select those options allowed by the CID.
- 2/ 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.

7.8 Government users. To acquire information on obtaining these inductors from the Government inventory system, contact DLA Land and Maritime ATTN: DSCC-FMTC, Post Office Box 3990, Columbus, OH 43218-3990, or telephone (614) 692-7727.

MILITARY INTERESTS:

Custodians:
Navy - EC
DLA - CC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - 7FXE

Preparing Activity:

DLA - CC

Project 5950-2024-001

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 <https://assist.dla.mil>.