

[INCH-POUND]

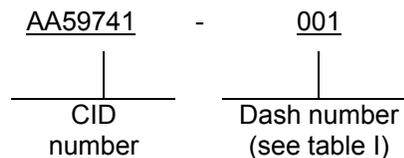
A-A-59741
October 25, 2002

COMMERCIAL ITEM DESCRIPTION

INDUCTOR, POWER, SHIELDED, ULTRAMINIATURE, SURFACE MOUNT

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

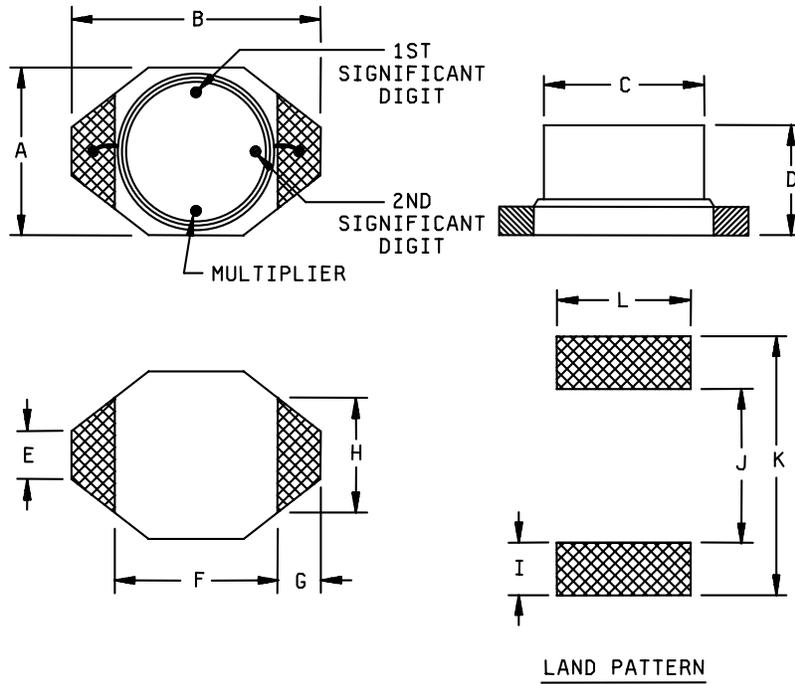
1. **SCOPE.** This CID covers the general requirements for a power inductor. Inductors covered by this CID are intended for commercial/industrial applications.
2. **CLASSIFICATION.** This CID uses a classification system, which is included in the Part Identification Number (PIN) as shown in the following 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).
- 3.2. Electrical characteristics. The electrical characteristics shall be as specified in table I.
- 3.3 Weight. The weight shall be no greater than 0.5 gram maximum.
- 3.4 Operating temperature range. The operating temperature range is -40°C to $+85^{\circ}\text{C}$.
- 3.5 Temperature rise. DC current rating for a 30°C rise.
- 3.6 Altitude. The maximum altitude is 70,000 feet.
- 3.7 Marking. Inductors supplied to this CID shall be marked with the manufacturer's standard commercial PIN.

Beneficial comments recommendations, additions, deletions, clarifications, etc., and any data which may improve this document should be addressed to: Defense Supply Center, Columbus, ATTN: DSCC-VAT, Post Office Box 3990, Columbus, OH 43216-5000, or telephone (614) 692-0557, or facsimile (FAX) (614) 692-6939.



Dimension	Inches	mm	Dimension	Inches	mm
A	.175 Max	4.45 Max	G	.040	1.02
B	.260 Max	6.60 Max	H	.120	3.05
C	.160 Dia	4.06 Dia	I	.055	1.40
D	.115 Max	2.92 Max	J	.160	4.06
E	.050	1.27	K	.270	6.86
F	.170	4.32	L	.140	3.56

NOTES:

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

FIGURE 1. Configuration and dimensions.

TABLE I. Electrical characteristics.

CID dash number AA59741-	L $\pm 20\%$ (μH)	Q min	DCR Max (Ohms)	SRF typ (MHz)	Current Max (A)
001	1.0	30 @ 200 KHz	.040	250	3.0
002	1.5	30 @ 200 KHz	.045	125	2.8
003	2.2	40 @ 200 KHz	.050	120	1.8
004	3.3	40 @ 200 KHz	.055	120	1.6
005	4.7	40 @ 200 KHz	.060	105	1.4
006	6.8	40 @ 200 KHz	.065	50	1.2
007	10	40 @ 200 KHz	.075	38	1.0
008	15	40 @ 100 KHz	.090	33	.80
009	22	40 @ 100 KHz	.11	25	.70
010	33	40 @ 100 KHz	.19	20	.60
011	47	40 @ 100 KHz	.23	20	.50
012	68	40 @ 100 KHz	.29	15	.40
013	100	40 @ 100 KHz	.48	10	.30
014	150	40 @ 100 KHz	.59	9	.26
015	220	40 @ 100 KHz	.77	6	.22
016	330	40 @ 100 KHz	1.4	5	.20
017	470	40 @ 100 KHz	1.8	4	.19
018	680	40 @ 100 KHz	2.2	3	.18
019	1000	40 @ 100 KHz	3.4	2	.15
020	1500	50 @ 100 KHz	4.2	2	.12
021	2200	50 @ 100 KHz	8.5	2	.10
022	3300	50 @ 100 KHz	11.0	1	.08
023	4700	50 @ 100 KHz	13.9	1	.06
024	6800	50 @ 100 KHz	25.0	1	.04
025	10000	50 @ 100 KHz	32.8	0.8	.02

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.

5.2 Market acceptance. The following market acceptance criteria are necessary to document the quality of the product to be provided under this CID:

- a. The company producing the item must have been producing a product meeting the requirements of this CID for at least 2 years.
- b. The company must have sold 1,000 units meeting this CID in the commercial marketplace over the past 2 years.

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. This section is not applicable to this CID.

7.4 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.

7.5 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.)

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

7.6 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) AA59741-	Vendor commercial PIN CAGE 02113 <u>1/</u>	CID dash number (see table I) AA59741-	Vendor commercial PIN CAGE 02113 <u>1/</u>
001	DS1608C-102	014	DS1608C-154
002	DS1608C-152	015	DS1608C-224
003	DS1608C-222	016	DS1608C-334
004	DS1608C-332	017	DS1608C-474
005	DS1608C-472	018	DS1608C-684
006	DS1608C-682	019	DS1608C-105
007	DS1608C-103	020	DS1608C-155
008	DS1608C-153	021	DS1608C-225
009	DS1608C-223	022	DS1608C-335
010	DS1608C-333	023	DS1608C-475
011	DS1608C-473	024	DS1608C-685
012	DS1608C-683	025	DS1608C-106
013	DS1608C-104		

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 inductors from the Government inventory system, contact Defense Supply Center, Columbus, ATTN: DSCC-CPAA, Post Office Box 3990, Columbus, OH 43216-5000, or telephone (614) 692-7741.

MILITARY INTERESTS:

Custodians:
Navy - EC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - 7FXE

Preparing Activity:

DLA - CC

Project 5950-1157