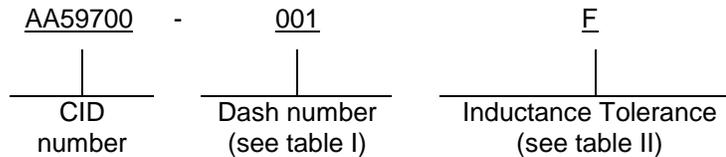


## COMMERCIAL ITEM DESCRIPTION

### COIL, RF, CHIP, FIXED, HIGH FREQUENCY, MINIATURE, SURFACE MOUNT

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

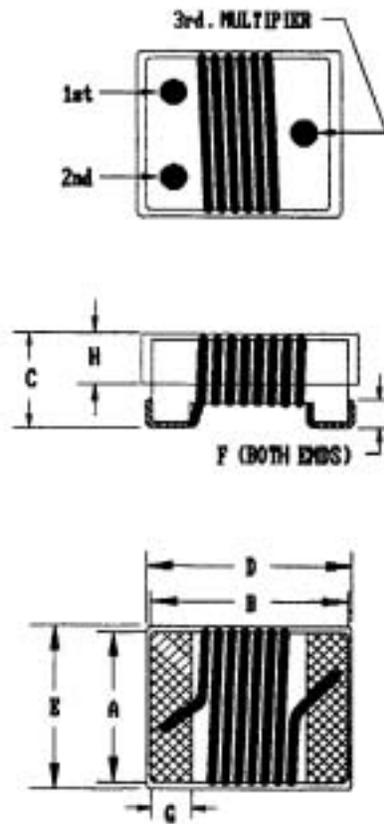
1. **SCOPE.** This CID covers the general requirements for a radio frequency coil. Coils covered by this CID are intended for commercial/industrial applications.
2. **CLASSIFICATION.** This CID uses a classification system which is included in the Part Identification Number (PIN) as shown in the following example (see 7.1).



### 3. SALIENT CHARACTERISTICS.

- 3.1 Interface and physical dimensions. Coils 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  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
- 3.5 Temperature rise. DC current rating for a  $15^{\circ}\text{C}$  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
A	.047 - .053	1.19 – 1.35
B	.075 - .085	2.41 – 2.67
C	.060 Max.	1.52 Max.
D	.095 Max.	2.41 Max.
E	.070 Max.	1.78 Max.
F	.010 - .025	0.25 – 0.64
G	.017 - .023	0.43 – 0.58
H	.020 Ref.	0.508 Ref.

NOTES:

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

FIGURE 1. Configuration and dimensions.

TABLE I. Electrical characteristics.

CID dash number AA59700-	Inductance(nH)	Tolerance ( $\pm\%$ )	Q Min	SRF Min (MHz)	DCR Max (OHMS)	$\frac{1}{I_{DCMAX}}$ (mA)
001	2.8 @ 250 MHz	20, 10, 5	80 @ 1500 MHz	7900	.06	800
002	3.0 @ 250 MHz	20, 10, 5	65 @ 1500 MHz	7900	.06	800
003	3.3 @ 250 MHz	20, 10, 5	50 @ 1500 MHz	7900	.08	600
004	5.6 @ 250 MHz	20, 10, 5	65 @ 1000 MHz	5500	.08	600
005	6.8 @ 250 MHz	20, 10, 5	50 @ 1000 MHz	5500	.11	600
006	7.5 @ 250 MHz	20, 10, 5	50 @ 1000 MHz	4500	.14	600
007	8.2 @ 250 MHz	20, 10, 5, 2	50 @ 1000 MHz	4700	.12	600
008	10 @ 250 MHz	20, 10, 5, 2	60 @ 500 MHz	4200	.10	600
009	12 @ 250 MHz	20, 10, 5, 2	50 @ 500 MHz	4000	.15	600
010	15 @ 250 MHz	20, 10, 5, 2	50 @ 500 MHz	3400	.17	600
011	18 @ 250 MHz	20, 10, 5, 2	50 @ 500 MHz	3300	.20	600
012	22 @ 250 MHz	20, 10, 5, 2	55 @ 500 MHz	2600	.22	500
013	24 @ 250 MHz	20, 10, 5, 2	50 @ 500 MHz	2000	.22	500
014	27 @ 250 MHz	20, 10, 5, 2	55 @ 500 MHz	2500	.25	500
015	33 @ 250 MHz	20, 10, 5, 2, 1	60 @ 500 MHz	2050	.27	500
016	36 @ 250 MHz	20, 10, 5, 2, 1	55 @ 500 MHz	1700	.27	500
017	39 @ 250 MHz	20, 10, 5, 2, 1	60 @ 500 MHz	2000	.29	500
018	43 @ 200 MHz	20, 10, 5, 2, 1	60 @ 500 MHz	1650	.34	500
019	47 @ 200 MHz	20, 10, 5, 2, 1	60 @ 500 MHz	1650	.31	500
020	56 @ 200 MHz	10, 5, 2, 1	60 @ 500 MHz	1550	.34	500
021	68 @ 200 MHz	10, 5, 2, 1	60 @ 500 MHz	1450	.38	500
022	82 @ 150 MHz	10, 5, 2, 1	65 @ 500 MHz	1300	.42	400
023	91 @ 150 MHz	20, 10, 5, 2, 1	65 @ 500 MHz	1200	.48	400
024	100 @ 150 MHz	10, 5, 2, 1	65 @ 500 MHz	1200	.46	400
025	110 @ 150 MHz	20, 10, 5, 2	50 @ 250 MHz	1000	.48	400

TABLE I. Electrical characteristics. - continued

CID dash number AA59700-	Inductance(nH)	Tolerance (±%)	Q Min	SRF Min (MHz)	DCR Max (OHMS)	$\frac{1}{I_{DCMAX}}$ (mA)
026	120 @ 150 MHz	10, 5, 2, 1	50 @ 250 MHz	1100	.51	400
027	150 @ 100 MHz	10, 5, 2, 1	50 @ 250 MHz	920	.56	400
028	180 @ 100 MHz	10, 5, 2, 1	50 @ 250 MHz	870	.64	400
029	220 @ 100 MHz	10, 5, 2	50 @ 250 MHz	850	.70	400
030	240 @ 100 MHz	20, 10, 5, 2	44 @ 250 MHz	690	1.0	350
031	270 @ 100 MHz	10, 5, 2	48 @ 250 MHz	650	1.0	350
032	330 @ 100 MHz	10, 5, 2	48 @ 250 MHz	600	1.4	310
033	390 @ 100 MHz	10, 5, 2	48 @ 250 MHz	560	1.5	290
034	470 @ 50 MHz	10, 5	33 @ 100 MHz	375	1.76	250
035	560 @ 25 MHz	10, 5	23 @ 50 MHz	340	1.90	230
036	680 @ 25 MHz	10, 5	23 @ 50 MHz	188	2.20	190
037	820 @ 25 MHz	10, 5	23 @ 50 MHz	215	2.35	180

TABLE II. Inductance tolerances

Code	Tolerance (percentage)
F	±1
G	±2
J	±5
K	±10
M	±20

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 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.

7.4 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>MFR's CAGE</u>	<u>MFR's name and address</u>
02113	Coilcraft Inc 1102 Silver Lake Road Cary, Illinois 60013-1658 Phone number (847) 639-2361 Uniform Resource Locator (URL): <a href="http://www.coilcraft.com">www.coilcraft.com</a>

7.5 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. 1/

CID dash number (see table I) AA59700-	Vendor commercial PIN CAGE 02113 <u>2/</u>	CID dash number (see table I) AA59700-	Vendor commercial PIN CAGE 02113 <u>2/</u>
001*	0805CS-020X*B*	020*	0805CS-560X*B*
002*	0805CS-3N0X*B*	021*	0805CS-680X*B*
003*	0805CS-030X*B*	022*	0805CS-820X*B*
004*	0805CS-050X*B*	023*	0805CS-910X*B*
005*	0805CS-060X*B*	024*	0805CS-101X*B*
006*	0805CS-070X*B*	025*	0805CS-111X*B*
007*	0805CS-080X*B*	026*	0805CS-121X*B*
008*	0805CS-100X*B*	027*	0805CS-151X*B*
009*	0805CS-120X*B*	028*	0805CS-181X*B*
010*	0805CS-150X*B*	029*	0805CS-221X*B*
011*	0805CS-180X*B*	030*	0805CS-241X*B*
012*	0805CS-220X*B*	031*	0805CS-271X*B*
013*	0805CS-240X*B*	032*	0805CS-331X*B*
014*	0805CS-270X*B*	033*	0805CS-391X*B*
015*	0805CS-330X*B*	034*	0805CS-471X*B*
016*	0805CS-360X*B*	035*	0805CS-561X*B*
017*	0805CS-390X*B*	036*	0805CS-681X*B*
018*	0805CS-430X*B*	037*	0805CS-821X*B*
019*	0805CS-470X*B*		

- 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.

7.6 Government users. To acquire information on obtaining these coils 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 5950-1068