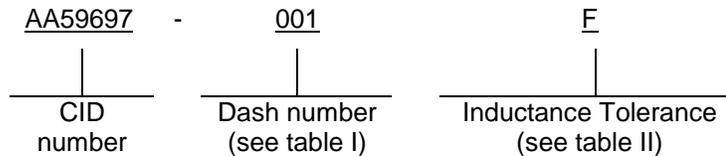


COMMERCIAL ITEM DESCRIPTION

COIL, RF, CHIP, FIXED, HIGH FREQUENCY

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

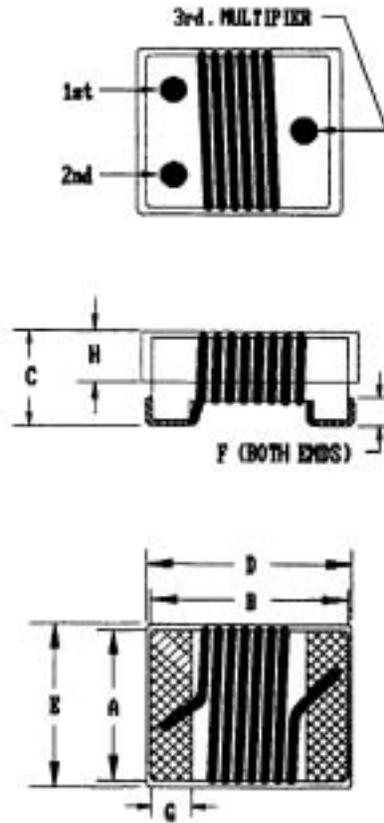
1. SCOPE. This CID covers the general requirements for a radio frequency coil. Coils covered by this CID are intended for commercial/industrial applications.
2. CLASSIFICATION. This CID uses a classification system which is included in the Part Identification Number (PIN) as shown in the following example (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°C to $+125^{\circ}\text{C}$.
- 3.5 Temperature rise. DC current rating for 15°C rise..
- 3.6 Altitude. The maximum altitude is 70,000 feet.
- 3.7 Marking. Coils 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	.076 - .084	1.93 – 2.13
B	.095 - .105	2.41 – 2.67
C	.080 Max.	2.03 Max.
D	.115 Max.	2.92 Max.
E	.110 Max.	2.79 Max.
F	.010 - .025	0.25 – 0.64
G	.015 - .025	0.38 – 0.64
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 AA59697-	Inductance (nH)	Tolerance (±%)	Q min	SRF min (MHz)	DCR Max (Ohms)	I _{DC} Max (mA)
001	10 @ 50 MHz	20, 10, 5, 2	50 @ 500 MHz	4100	.08	1000
002	12 @ 50 MHz	20, 10, 5, 2	50 @ 500 MHz	3300	.09	1000
003	15 @ 50 MHz	20, 10, 5, 2	50 @ 500 MHz	2500	.10	1000
004	18 @ 50 MHz	20, 10, 5, 2	50 @ 350 MHz	2500	.11	1000
005	22 @ 50 MHz	20, 10, 5, 2, 1	55 @ 350 MHz	2400	.12	1000
006	27 @ 50 MHz	20, 10, 5, 2	55 @ 350 MHz	1600	.13	1000
007	33 @ 50 MHz	20, 10, 5, 2	60 @ 350 MHz	1600	.14	1000
008	39 @ 50 MHz	20, 10, 5, 2	60 @ 350 MHz	1500	.15	1000
009	47 @ 50 MHz	20, 10, 5, 2, 1	65 @ 350 MHz	1500	.16	1000
010	56 @ 50 MHz	10, 5, 2, 1	65 @ 350 MHz	1300	.18	1000
011	68 @ 50 MHz	10, 5, 2, 1	65 @ 350 MHz	1300	.20	1000
012	82 @ 50 MHz	10, 5, 2, 1	60 @ 350 MHz	1000	.22	1000
013	100 @ 25 MHz	10, 5, 2, 1	60 @ 350 MHz	1000	.56	650
014	120 @ 25 MHz	10, 5, 2, 1	60 @ 350 MHz	950	.63	650
015	150 @ 25 MHz	10, 5, 2, 1	45 @ 100 MHz	850	.70	580
016	180 @ 25 MHz	10, 5, 2, 1	45 @ 100 MHz	750	.77	620
017	220 @ 25 MHz	10, 5, 2, 1	45 @ 100 MHz	700	.84	500
018	270 @ 25 MHz	10, 5, 2, 1	45 @ 100 MHz	600	.91	500
019	330 @ 25 MHz	10, 5, 2, 1	45 @ 100 MHz	570	1.05	450
020	390 @ 25 MHz	10, 5, 2, 1	45 @ 100 MHz	500	1.12	470
021	470 @ 25 MHz	10, 5, 2, 1	45 @ 100 MHz	450	1.19	470
022	560 @ 25 MHz	10, 5, 2, 1	45 @ 100 MHz	415	1.33	400
023	620 @ 25 MHz	10, 5, 2, 1	45 @ 100 MHz	375	1.40	300
024	680 @ 25 MHz	10, 5, 2, 1	45 @ 100 MHz	375	1.47	400
025	750 @ 25 MHz	10, 5, 2, 1	45 @ 100 MHz	360	1.54	360
026	820 @ 25 MHz	10, 5, 2, 1	45 @ 100 MHz	350	1.61	400
027	910 @ 25 MHz	10, 5, 2, 1	35 @ 50 MHz	320	1.68	380
028	1000 @ 25 MHz	10, 5, 2, 1	35 @ 50 MHz	290	1.75	370
029	1200 @ 7.9 MHz	10, 5, 2	35 @ 50 MHz	250	2.0	310
030	1500 @ 7.9 MHz	10, 5, 2	28 @ 50 MHz	200	2.3	330
031	1800 @ 7.9 MHz	10, 5, 2	28 @ 50 MHz	160	2.6	300
032	2200 @ 7.9 MHz	10, 5, 2	28 @ 50 MHz	160	2.8	280
033	2700 @ 7.9 MHz	10, 5, 2	22 @ 25 MHz	140	3.2	290
034	3300 @ 7.9 MHz	10, 5, 2	22 @ 25 MHz	110	3.4	290

TABLE I. Electrical characteristics. - continued

CID dash number AA59697-	Inductance (nH)	Tolerance (±%)	Q min	SRF min (MHz)	DCR Max (Ohms)	I _{DC} Max (mA)
035	3900 @ 7.9 MHz	10, 5, 2	20 @ 25 MHz	100	3.6	260
036	4700 @ 7.9 MHz	10, 5, 2	20 @ 25 MHz	90	4.0	260
037	5600 @ 7.9 MHz	10, 5	16 @ 7.9 MHz	20	4.0	240
038	6800 @ 7.9 MHz	10, 5	18 @ 7.9 MHz	40	4.9	200
039	8200 @ 7.9 MHz	10, 5	18 @ 7.9 MHz	25	6.0	170

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): www.coilcraft.com

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) AA59697-	Vendor commercial PIN CAGE 02113 2/	CID dash number (see table I) AA59697-	Vendor commercial PIN CAGE 02113 2/
001*	1008CS-100X*B*	021*	1008CS-471X*B*
002*	1008CS-120X*B*	022*	1008CS-561X*B*
003*	1008CS-150X*B*	023*	1008CS-621X*B*
004*	1008CS-180X*B*	024*	1008CS-681X*B*
005*	1008CS-220X*B*	025*	1008CS-751X*B*
006*	1008CS-270X*B*	026*	1008CS-821X*B*
007*	1008CS-330X*B*	027*	1008CS-911X*B*
008*	1008CS-390X*B*	028*	1008CS-102X*B*
009*	1008CS-470X*B*	029*	1008CS-122X*B*
010*	1008CS-560X*B*	030*	1008CS-152X*B*
011*	1008CS-680X*B*	031*	1008CS-182X*B*
012*	1008CS-820X*B*	032*	1008CS-222X*B*
013*	1008CS-101X*B*	033*	1008CS-272X*B*
014*	1008CS-121X*B*	034*	1008CS-332X*B*
015*	1008CS-151X*B*	035*	1008CS-392X*B*
016*	1008CS-181X*B*	036*	1008CS-472X*B*
017*	1008CS-221X*B*	037*	1008CS-562X*B*
018*	1008CS-271X*B*	038*	1008CS-682X*B*
019*	1008CS-331X*B*	039*	1008CS-822X*B*
020*	1008CS-391X*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 5950-1065