[INCH-POUND]
A-A-55088C
9 June 2010
SUPERSEDING
A-A-55088B
9 September 2003

COMMERCIAL ITEM DESCRIPTION

RESISTORS, FLAMEPROOF, FUSIBLE

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 flameproof, fusible resistors. These resistors act as a wire-wound resistor and a fuse, and are used in applications where precise control of fusing point and time lags are necessary. These resistors eliminate fire hazard and circuit board damage due to overheated components. Resistors covered by this CID are intended for commercial/industrial applications and are not used in military systems needing stringent environmental and electrical requirements.

* 2. CLASSIFICATION or IDENTIFICATION NUMBER (PIN). This CID uses a classification system which is included in the PIN as shown in the following examples (see 7.1).

AA55088	-	01		K
CID number		Dash number (see table I)		Resistance tolerance (see 3.3)

3. SALIENT CHARACTERISTICS.

3.1 Interface and physical dimensions. The resistors supplied to this CID shall meet the interface and physical dimensions as specified herein (see figure 1).

3.2 Resistance value. The resistance range shall be 0.2 ohm minimum to 200 ohms maximum. Specific resistance values are specified in table I by dash number.

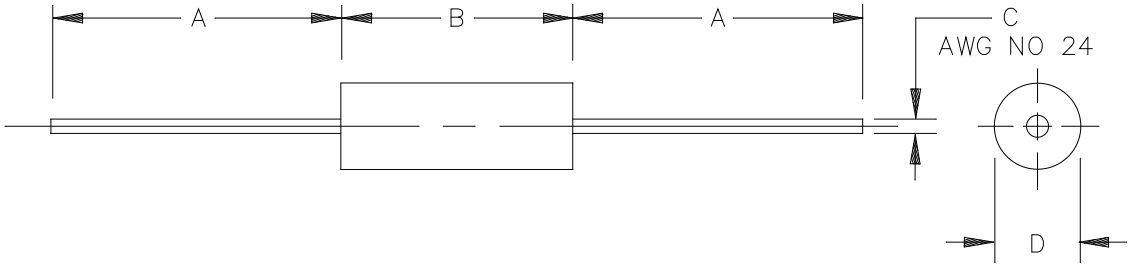
3.3 Resistance tolerance. Resistors are available in resistance tolerances (K) ±10 percent, (J) ±5 percent, and (G) ±2 percent.

3.4 Operating temperature. The operating temperature range shall be -55°C to +150°C.

3.5 Temperature coefficient. The temperature coefficient shall be ±150 ppm for less than 1 ohm, and ±50 ppm for 1 ohm and above.

Beneficial comments, recommendations, additions, deletions, etc. and any data that may improve this document should be sent to: Defense Supply Center Columbus, ATTN: DSCC-VAT, Post Office Box 3990, Columbus, OH 43218-3990, or emailed to resistor@dla.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at https://assist.daps.dla.mil.

3.6 Fusing characteristics. The fusing characteristics shall be in accordance with table I.



Ltr	Inches		mm	
	Min	Max	Min	Max
A	1.25	---	31.75	---
B	---	.400	---	10.16
C	.020		0.51	
D	---	.155	---	3.94

*

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.

FIGURE 1. Configuration and dimensions.

3.7 Marking. Resistors supplied to this commercial item description shall be marked with the manufacturers standard commercial PIN.

* 3.8 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable 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.

* 3.9 Workmanship. Resistors 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.

4. REGULATORY REQUIREMENTS. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with 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 is 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.

TABLE I. Fusing characteristics.

Dash number	Resistance (ohms)	Steady state		Blow condition I			Blow condition II		
		Current	Dissipation (watts)	Current	Dissipation (watts)	Blow time (T max)	Current	Dissipation (watts)	Blow time (T max)
-01	0.2	2.2 A	1.0	10 A	20	500 ms	25 A	125	50 ms
-02	0.2	2.2 A	1.0	10 A	20	300 ms	25 A	125	30 ms
-03	0.5	1.4 A	1.0	6 A	18	10 sec	15 A	112	100 ms
-04	0.5	1.4 A	1.0	6 A	18	500 ms	15 A	112	50 ms
-05	0.5	1.4 A	1.0	6 A	18	50 ms	15 A	112	10 ms
-06	1.0	1.0 A	1.0	4 A	16	10 sec	10 A	100	100 ms
-07	1.0	1.0 A	1.0	4 A	16	500 ms	10 A	100	50 ms
-08	1.0	1.0 A	1.0	4 A	16	50 ms	10 A	100	10 ms
-09	2.0	700 mA	1.0	3 A	18	10 sec	7 A	98	50 ms
-10	2.0	700 mA	1.0	3 A	18	200 ms	7 A	98	50 ms
-11	2.0	700 mA	1.0	3 A	18	50 ms	7 A	98	10 ms
-12	5.0	450 mA	1.0	2 A	20	200 ms	4.5 A	101	50 ms
-13	5.0	400 mA	0.8	1.5 A	10	50 ms	4.0 A	80	10 ms
-14	5.0	350 mA	0.6	1.0 A	5	100 ms	1.4 A	10	20 ms
-15	10	300 mA	0.9	1.2 A	14	200 ms	3.0 A	90	10 ms
-16	10	300 mA	0.9	1.0 A	10	100 ms	1.3 A	17	50 ms
-17	10	200 mA	0.4	600 mA	3.6	100 ms	900 mA	8	50 ms
-18	20	220 mA	1.0	600 mA	7.2	10 sec	900 mA	16	100 ms
-19	20	220 mA	1.0	600 mA	7.2	100 ms	900 mA	16	50 ms
-20	20	150 mA	0.4	350 mA	2.4	500 ms	450 mA	4	50 ms
-21	50	140 mA	1.0	400 mA	8.0	500 ms	600 mA	18	50 ms
-22	50	130 mA	0.8	350 mA	6.1	100 ms	450 mA	10	50 ms
-23	50	80 mA	0.3	200 mA	2.0	200 ms	240 mA	2.9	50 ms
-24	100	100 mA	1.0	250 mA	6.2	10 sec	300 mA	9.0	100 ms
-25	100	80 mA	0.6	200 mA	4.0	200 ms	250 mA	6.2	250 ms
-26	100	60 mA	0.4	140 mA	2.6	10 sec	180 mA	3.2	200 ms
-27	200	70 mA	1.0	200 mA	8.0	10 sec	250 mA	12.5	100 ms
-28	200	60 mA	0.8	150 mA	4.0	100 ms	250 mA	12.5	10 ms

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 Environmentally preferable material. Environmentally preferable materials should be used to the maximum extent possible to meet the requirements of this specification. As of the dating of this document, the U.S. Environmental Protection Agency (EPA) is focusing efforts on reducing 31 priority chemicals. The list of chemicals and additional information is available on their website at http://www.epa.gov/osw/hazard/wastemin/priority.htm. Included in the EPA list of 31 priority chemicals are cadmium, lead, and mercury. Use of these materials should be minimized or eliminated unless needed to meet the requirements specified herein (see Section 3)."

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

* 7.4 Source of documents.

FEDERAL REGULATIONS

FAR 23.403 - Federal Acquisition Regulations (FAR) – Use of Recovered Materials.

(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.)

7.5 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 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	MFR's name and address
54294	IRC, Incorporated Wirewound and Film Technologies Division 736 Greenway Road Boone, North Carolina 28607-1860 Phone:828-264-8861 Fax:828-264-8866 Email: david.winkler@irctt.com Website: www.irctt.com
56637	RCD Components, Incorporated 520 East Industrial Park Drive Manchester, NH 03109-5316 Phone: (603) 669-0054 Fax: (603) 669-5455 Email: sales@rcdcomponents.com Website: www.rcdcomponents.com

7.7 Part number (P/N) supersession data. This CID supersedes the following manufacturers P/N as shown in table II. 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/
AA55088-01*		F501	AA55088-15*		F515
AA55088-02*		F502	AA55088-16*		F516
AA55088-03*		F503	AA55088-17*		F517
AA55088-04*		F504	AA55088-18*		F518
AA55088-05*		F505	AA55088-19*		F519
AA55088-06*		F506	AA55088-20*		F520
AA55088-07*		F507	AA55088-21*		F521
AA55088-08*	54294	F508	AA55088-22*	54294	F522
AA55088-09*		F509	AA55088-23*		F523
AA55088-10*		F510	AA55088-24*		F524
AA55088-11*		F511	AA55088-25*		F525
AA55088-12*		F512	AA55088-26*		F526
AA55088-13*		F513	AA55088-27*		F527
AA55088-14*		F514	AA55088-28*		F528
AA55088-01*		FR88-01	AA55088-15*		FR88-15
AA55088-02*		FR88-02	AA55088-16*		FR88-16
AA55088-03*		FR88-03	AA55088-17*		FR88-17
AA55088-04*		FR88-04	AA55088-18*		FR88-18
AA55088-05*		FR88-05	AA55088-19*		FR88-19
AA55088-06*		FR88-06	AA55088-20*		FR88-20
AA55088-07*		FR88-07	AA55088-21*		FR88-21
AA55088-08*	56637	FR88-08	AA55088-22*	56637	FR88-22
AA55088-09*		FR88-09	AA55088-23*		FR88-23
AA55088-10*		FR88-10	AA55088-24*		FR88-24
AA55088-11*		FR88-11	AA55088-25*		FR88-25
AA55088-12*		FR88-12	AA55088-26*		FR88-26
AA55088-13*		FR88-13	AA55088-27*		FR88-27
AA55088-14*		FR88-14	AA55088-28*		FR88-28

1/ The manufacturers P/N shall not be used for procurement to the requirements of this CID. At the time or preparation of this CID, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown.

7.8 Government users. To acquire information on obtaining these resistors from the Government inventory system, Defense Supply Center, Columbus, ATTN: DSCC-CPB, Post Office Box 3990, Columbus, OH 43218-3990, or telephone (614) 692-7678.

* 7.8.1 National stock number. This section is not applicable to this CID.

* 7.9 Changes from previous issue. The margins of this CID specification sheet are marked with an asterisk to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

MILITARY INTERESTS:

Custodian:
NAVY - EC
DLA - CC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - 7FXE

Preparing activity:
DLA - CC

Project 5905-2010-013

NOTE: The activities listed above were interested in this document as 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.daps.dla.mil.