[INCH-POUND]
A-A-59715/5
10 June 2002

## COMMERICAL ITEM DESCRIPTION <br> RESISTORS, FIXED AND ADJUSTABLE, WIRE WOUND, POWER TYPE

The General Services Administration has authorized the use of this Commercial Item Description (CID) for all federal agencies.

The complete requirements for procuring fixed and adjustable wire wound power resistors described herein, shall consist of this document and the issue in effect of CID A-A-59715.

CLASSIFICATION. This CID uses a classification system which is included in the Part Identification Number (PIN) (see 7.1). The PIN shall be AA5971505-******. Complete PIN example AA5971505-A1005J.


## SALIENT CHARTACTERISTICS.

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

Resistor type. Designates the type and power rating of each resistor (see table 1).
Table 1 Resistor type.

| Designation | Wattage <br> $\left(25^{\circ} \mathrm{C}\right)$ | Resistance range <br> (in ohms) | Designation | Wattage <br> $\left(25^{\circ} \mathrm{C}\right)$ | Resistance range <br> (in ohms) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | 35 | 0.020 to 1.25 | L | 220 | 0.063 to 39.00 |
| B | 90 | 0.021 to 12.00 | M | 270 | 0.065 to 41.00 |
| C | 100 | 0.021 to 11.00 | N | 300 | 0.100 to 20.00 |
| D | 110 | 0.029 to 16.00 | $\mathrm{P} 1 /$ | 300 | 0.100 to 20.00 |
| E | 135 | 0.028 to 21.00 | R | 375 | 0.130 to 80.00 |
| F | 150 | 0.043 to 27.00 | S | 500 | 0.190 to 117.00 |
| G | 160 | 0.038 to 26.00 | T | 750 | 0.310 to 198.00 |
| H | 180 | 0.031 to 29.00 | U | 1000 | 0.410 to 258.00 |
| J | 190 | 0.056 to 35.00 | V | 1500 | 0.560 to 358.00 |
| K | 215 | 0.068 to 43.00 |  |  |  |

1/ Adjustable type

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

STYLE A


| Designation | Style | Dimensions |  | Designation | Style | Dimensions |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | D | L |  |  | D | L |
| A | A | 0.563 | 2.000 | L | A | 1.125 | 6.000 |
| B | A | 0.563 | 4.000 | M | A | 1.500 | 5.000 |
| C | A | 0.750 | 3.500 | N 1/ | B | 1.125 | 8.500 |
| D | A | 0.563 | 5.000 | P 1/ $\underline{1} /$ | B | 1.125 | 8.500 |
| E | A | 0.563 | 6.000 | R | A | 1.125 | 10.500 |
| F | A | 1.000 | 5.000 | S | A | 1.625 | 10.500 |
| G | A | 0.750 | 6.000 | T | A | 2.500 | 12.000 |
| H | A | 0.750 | 6.500 | U | A | 2.500 | 15.000 |
| J | A | 1.000 | 6.000 | V | A | 2.500 | 20.000 |
| K | A | 1.000 | 7.000 |  |  |  |  |

1/ For values over 16 ohms, terminal dimensions are the same as style A.
2/ Adjustable type

| Inches | mm | Inches | mm | Inches | mm | Inches | mm | Inches | mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.563 | 14.30 | 1.500 | 38.10 | 3.500 | 88.90 | 6.500 | 165.10 | 12.000 | 304.80 |
| 0.750 | 19.05 | 1.625 | 41.28 | 4.000 | 101.60 | 7.000 | 177.80 | 15.000 | 381.00 |
| 1.000 | 25.40 | 2.000 | 50.80 | 5.000 | 127.00 | 8.500 | 215.90 | 20.000 | 508.00 |
| 1.125 | 28.58 | 2.500 | 63.50 | 6.000 | 152.40 | 10.500 | 266.70 |  |  |

## NOTES:

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

FIGURE 1. Resistor, Fixed and Adjustable.

Resistance. The nominal resistance value expressed in ohms is identified by a four-digit number; the first three digits represent significant figures and the last digit specifies the number of zeros to follow. Resistance values for specific resistors are covered in the individual CID sheets. When the value of resistance is less than 100 ohms, or when fractional values of an ohm is required, the " $R$ " will be substituted for one of the significant digits to represent the decimal point. When the letter " $R$ " is used, succeeding digits of the group represent significant figures. The resistance value designations are shown in table II below.

Table II Designation of resistance values.

| Designation | Resistance (in ohms) |  |
| :---: | :---: | :---: |
| R020 to R999 incl. | 0.02 to | 0.999 incl. |
| 1R00 to 9R99 incl. | 1.0 to | 9.99 incl. |
| 10R0 to 99R9 incl. | 10.0 to | 99.9 incl. |
| 1000 to 3580 incl. | 100 to | 358 incl. |

Resistance tolerance. The resistance tolerance available is K ( $\pm 10$ percent).
Power rating. The power rating shall be specified in table I, at $25^{\circ} \mathrm{C}$, derated to zero at $400^{\circ} \mathrm{C}$.
Temperature coefficient of resistance (TCR). The temperature coefficient of resistance (TCR) is as follows:
Resistance
All Values

$$
\frac{\mathrm{TCR}\left(\mathrm{ppm} /{ }^{\circ} \mathrm{C}\right)}{ \pm 400}
$$

Marking. Resistors supplied to this CID shall be marked with the manufacturer's (MFR's) standard commercial PIN.

## NOTES.

PIN. The PIN should be used for Government purposes to buy commercial products to this CID. See section 2 for PIN format example.

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.

## Source of documents.

Commercial Item Description
A-A-59715 - Resistors, Fixed and Adjustable, Wire Wound, Power Type, General Requirement for.
(Copies of commercial item descriptions are available from the Document Automation and Production Service, Building 4D (DPM-DODSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094)

Ordering data. Ordering data is as specified in A-A-59715.

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 the 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).

| Manufacturer's CAGE | Manufacturer's name and address |
| :---: | :--- |
| 44655 | Ohmite Manufacturing Company <br> 3605 Howard Street <br> Skokie, IL 60076 |
|  | Plant : |
|  | Baja Oriente |
| Calle 8 Esquina Calle Cuarta, S/N |  |
| Parque Industiial Fondeport el Sauzal |  |
| Ensenada, Baja California, Mexico, 22760 |  |

Part number ( $\mathrm{P} / \mathrm{N}$ ) supersession data. This CID supersedes the following MFR's $\mathrm{P} / \mathrm{N}$ as shown. This information is being provided to assist in reducing proliferation in the Government inventory system.

TABLE III. $\mathrm{P} / \mathrm{N}$ supersession data.

| MFR's CAGE | Designation | MFR's style 1/ | MFR's CAGE | Designation | MFR's style 1/ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 44655 | A | C35K-*** | 44655 | L | C220K-*** |
|  | B | C90K-*** |  | M | C270K-*** |
|  | C | C100K-*** |  | N | C300K-*** |
|  | D | C110K-*** |  | P | E300K-*** |
|  | E | C135K-*** |  | R | C375K-*** |
|  | F | C150K-*** |  | S | C500K-*** |
|  | G | C160K-*** |  | T | C750K-*** |
|  | H | C180K-*** |  | U | C1000K-*** |
|  | J | C190K-*** |  | V | C1500K-*** |
|  | K | C215K-*** |  |  |  |

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.

Government users. To acquire information on obtaining these resistors from the Government inventory system, contact Defense Supply Center, Columbus, ATTN: DSCC-CP, Post Office Box 3990, Columbus, OH 43213-5000, or telephone (614) 692-7684.

MILITARY INTERESTS:
Custodian
NAVY - EC
DLA - CC

## CIVIL AGENCY COORDINATING ACTIVITY:

GSA - 7FXE
Preparing Activity:
DLA - CC
Project 5905-1651-05

