

[METRIC]
A-A-55562/2C
10 April 2023
SUPERSEDING
A-A-55562/2B
27 April 2018

COMMERCIAL ITEM DESCRIPTION

RESISTOR, VOLTAGE SENSITIVE (VARISTOR, METAL OXIDE), CHIP, STYLE 0805

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

The complete requirements for procuring a surface-mount, voltage sensitive, metal oxide, style 0805 chip varistor described herein shall consist of this document and the issue in effect of CID [A-A-55562](#).

CLASSIFICATION OR PART IDENTIFICATION NUMBER (PIN). This commercial item description (CID) specification sheet uses a classification system, which is included in the PIN as shown in the following example (see NOTES).

AA5556202-001P

AA55562 - Abbreviated CID number
02 - Applicable CID sheet (two digits)
-001 - Dash number (see applicable CID sheet)
P - Termination finish

SALIENT CHARACTERISTICS

Interface and physical dimensions. Varistors supplied to this CID shall be as specified herein (see [figure 1](#)).

Working voltage (dc). The working voltage (dc) shall be as specified in [table I](#).

Breakdown voltage. The breakdown voltage shall be as specified in [table I](#).

Clamping voltage. The clamping voltage shall be as specified in [table I](#).

Peak current. The peak current shall be as specified in [table I](#).

Transient energy. The transient voltage shall be as specified in [table I](#).

Capacitance. The capacitance shall be as specified in [table I](#).

Inductance. The inductance shall be as specified in [table I](#).

Comments, suggestions, or questions on this document should be addressed to DLA Land and Maritime
ATTN: 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.dla.mil>.

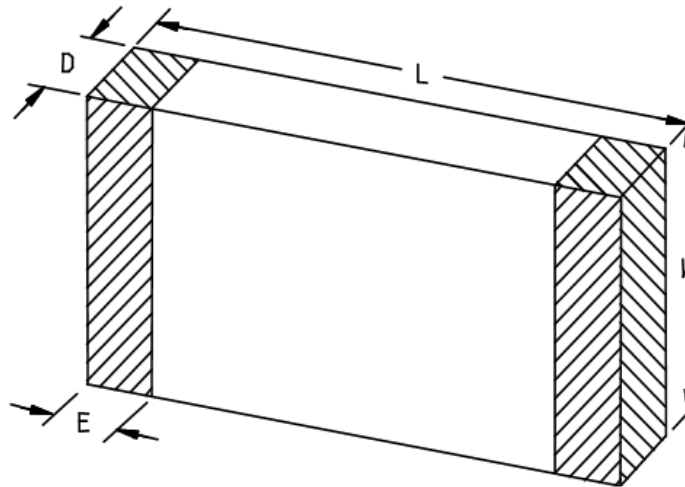


Termination finish. The termination finish shall be Nickel barrier with Tin alloy plated finish (Ni/Sn), code letter P.

Marking. Resistors supplied to this CID specification sheet shall be marked as specified in [A-A-55562](#).

NOTE

PIN. The PIN should be used for Government purposes to buy commercial products to this CID specification sheet. See CLASSIFICATION for PIN format example.



L	W	D	E
2.01 ± 0.2	1.25 ± 0.2	1.02 max	0.71 max

<u>mm</u>	<u>Inches</u>	<u>mm</u>	<u>Inches</u>	<u>mm</u>	<u>Inches</u>
0.2	0.01	1.02	0.040	2.01	0.079
0.71	0.028	1.25	0.049		

NOTES:

1. Dimensions are in millimeters. Inch-pound equivalents are given for information only.
2. The US government preferred system of measurement is the metric SI system. However, this item was originally designed using inch-pound units of measurement. In the event of conflict between the metric and inch-pound units, the inch-pound units shall take precedence.

FIGURE 1. Interface and physical dimensions, style 0805.

Source of documents.

Commercial Item Description

[A-A-55562](#)

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Resistor, Voltage Sensitive (Varistor, Metal Oxide), Chip

(Copies of these documents are available online at <https://quicksearch.dla.mil/>.)

TABLE I. Performance characteristics.

Dash number	Working Voltage (dc) Max	Breakdown Voltage	Clamping Voltage (max) <u>1/</u>	Peak current A (max)	Transient energy Joule (max)	Cap (pF) typical		Inductance (nH) typical
Test Condition	<50 μ A	1 mA dc	8/20 μ s	8/20 μ s	10/1000 μ s	0.5 V rms @ 1kHz 1MHz		di/dt= 100 mA/ns
001P	3.3 <u>2/</u>	4.1 - 6.0	10	40	0.1	1300	930	<1.5
002P	3.3 <u>2/</u>	3.7 - 5.6	10	120	0.3	5500	4000	1.5
003P	5.6	7.6 - 9.3	15.5	40	0.1	1250	860	<1.5
004P	5.6	7.1 - 8.7	15.5	120	0.3	3500	2400	1.5
005P	12.0	14.0 - 18.3	25	40	0.1	525	400	<1.5
006P	14.0	16.5 - 20.3	30	40	0.1	375	280	<1.5
007P	14.0	15.9 - 19.4	30	120	0.3	1100	820	1.5
008P	18.0 <u>3/</u>	22.9 - 28.0	40	30	0.1	350	275	<1.5
009P	18.0 <u>3/</u>	22.5 - 27.5	40	100	0.3	650	500	1.5
010P	26.0	31.0 - 37.9	58	30	0.1	140	110	<1.5
011P	26.0	31.5 - 37.3	58	100	0.3	250	190	1.5
012P	30.0	37.0 - 46.0	65	30	0.1	100	80	<1.5
013P	9.0	11.0 - 14.0	20	40	0.1	780	585	<1.5

1/ Maximum peak voltage across the varistor measured at a specified pulse current and waveform.

Transient Energy Rating

0.1 Joule

0.2-0.3 Joules

Pulse Current and Waveform

2A 8/20 μ s

5A 8/20 μ s

2/ Test condition <100 μ A

3/ Withstands 24.5 VDC for 5 minutes (automotive applications)

Commercial products. As part of the market analysis and research effort, this CID specification sheet was coordinated with the following manufacturers of commercial products. At the time of CID specification sheet preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID specification sheet. (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

16299

MFR's name and address

AVX Corporation
One AVX Boulevard
Fountain Inn, SC 29644-9039
Phone: 864-967-2150
Email: inquiry@avx.com
Website: <http://www.avx.com>

Part number (P/N) supersession data. This CID specification sheet PINs 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 coded number AA5556202-	MFR's CAGE	MFR's P/N ^{1/}
001P	16299	VC080503A100
002P		VC080503C100
003P		VC080505A150
004P		VC080505C150
005P		VC080512A250
006P		VC080514A300
007P		VC080514C300
008P		VC080518A400
009P		VC080518C400
010P		VC080526A580
011P		VC080526C580
012P		VC080530A650
013P		VC080509A200

^{1/} The manufacturers P/N shall not be used for procurement to the requirements of this CID specification sheet. At the time of preparation of this CID specification sheet, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown. For actual part marking requirements, see paragraph 3.5 of [A-A-55562](#).

National Stock Number. This section is not applicable to this CID specification sheet.

Changes from previous issue. The margins of this CID specification sheet are marked with a vertical line 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 - FAS
Preparing Activity:
DLA - CC
Project 5905-2023-005

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.dla.mil>.