[METRIC]
A-A-55562/1A
30 August 2001
SUPERSEDING
A-A-55562/1
13 February 1995

COMMERCIAL ITEM DESCRIPTION

RESISTOR, VOLTAGE SENSITIVE (VARISTOR, METAL OXIDE), CHIP, STYLE 0603

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

1. SCOPE. This CID covers the requirements for a surface-mount, voltage sensitive resistor, style 0603. Varistors by this CID are intended for commercial/industrial applications.

2. CLASSIFICATION. This CID uses a classification system which is included in the Part or Identification Number (PIN) (see 7.1). The PIN shall be AA5556201- (plus a dash number from table I). Complete PIN example: AA5556201-001P.

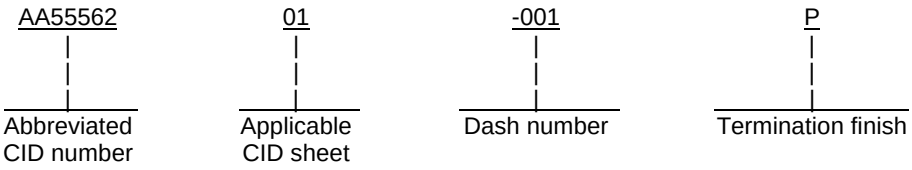


TABLE I. Performance characteristics.

Dash number	Working Voltage (dc) Max	Breakdown Voltage	Clamping Voltage (max) 1/	Peak current A (max)	Transient energy Joule (max)	Cap (pF) typical		Inductance (nH) typical
Test Condition	<50 μA	1 mA dc	8/20 μs	8/20 μs	10/1000 μs	0.5 V rms @ 1kHZ	1MHz	di/dt= 100 mA/ns
001P	3.3 2/	4.1 – 6.0	10	30	0.1	1800	1230	<1.0
002P	5.6	7.6 - 9.3	15.5	30	0.1	1000	825	1.0
003P	9.0	11.0 - 14.0	20	30	0.1	650	550	<1.0
004P	14.0	16.5 - 20.3	30	30	0.1	500	424	<1.0
005P	18.0	22.9 - 28.0	40	30	0.1	275	225	<1.0
006P	26.0	31.0 - 38.0	58	30	0.1	200	160	<1.0
007P	30.0	37.0 - 46.0	65	30	0.1	175	150	<1.0

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

Transient Energy Rating	Pulse Current and Waveform
0.1 Joule	2A 8/20 μs

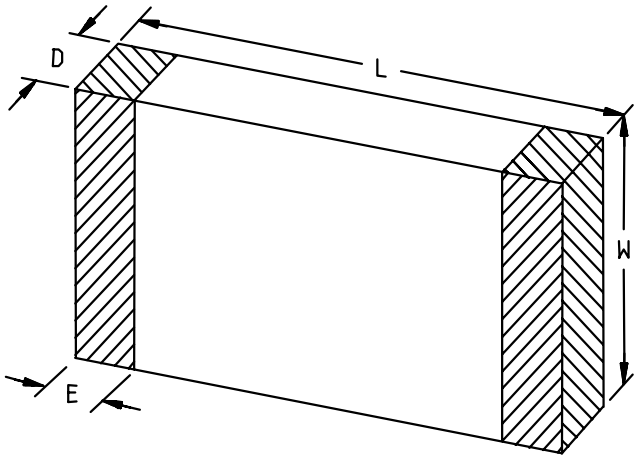
2/ Test condition <100 μA.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Defense Supply Center, Columbus, ATTN: DSCC-VAT, Post Office Box 3990, Columbus, OH 43216-5000 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 5905

3. SALIENT CHARACTERISTICS

3.1 Interface and physical dimensions. Interface and physical dimensions shall be as specified herein (see figure 1).



L	W	D	E
1.6 ±0.15	0.8 ±0.15	0.9 max	0.35 max

mm	Inches
0.15	0.006
0.35	0.014
0.7	0.03
0.8	0.03
0.9	0.04
1.6	0.06

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 0603.

3.2 Working voltage (dc). The working voltage (dc) shall be as specified in table I.

3.3 Breakdown voltage. The breakdown voltage shall be as specified in table I.

3.4 Clamping voltage. The clamping voltage shall be as specified in table I.

3.5 Peak current. The peak current shall be as specified in table I.

3.6 Transient energy. The transient voltage shall be as specified in table I.

3.7 Capacitance. The capacitance shall be as specified in table I.

3.8 Inductance. The inductance shall be as specified in table I.

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

4. REGULATORY REQUIREMENTS. This section is not applicable to this CID.

5. PRODUCT CONFORMANCE PROVISIONS. Product conformance provisions shall be as specified in A-A-55562.

6. PACKAGING. Packaging shall be as specified in A-A-55562.

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 varistors to DSCC under the Military Parts Control Advisory Group (MPCAG) evaluation program, CAGE code 58536 should be used.

7.3 Source of document.

Commercial Item Description

A-A-55562 - Resistor, Voltage Sensitive (Varistor, Metal Oxide), Chip.

(Copies of commercial item descriptions are available from the Document Automation and Production Service (DAPS), Building 4D (DPM-DODSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

7.4 Ordering data. Ordering data shall be as specified in A-A-55562.

7.5 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.)

MFG's CAGE	MFG's name and address
16299	AVX Corporation 3900 Electronics Dr. Raleigh, NC 27604-1698 (919) 878-6200

7.6 Part number (P/N) supersession data. These CID part numbers supersede the following MFR's P/N's as shown. This information is being provided to assist in reducing proliferation in the Government inventory system.

CID dash number (see table I) AA5556201-	MFG's P/N 1/ for CAGE 16299
001P	VC060303A100
002P	VC060305A150
003P	VC060309A200
004P	VC060314A300
005P	VC060318A400
006P	VC060326A580
007P	VC060330A650

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 PIN shown. For actual part marking requirements see the marking paragraph.

7.7 Government users. To acquire information on obtaining these varistors from the Government inventory system, contact Defense Supply Center, Columbus, ATTN: DSCC-CP, P. O. Box 3990, Columbus, OH 43216-5000, or telephone (614) 692-7684.

MILITARY INTERESTS:

Custodians:
NAVY-EC
DLA-CC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - 7FXE

Preparing Activity:

DLA-CC

Project 5905-1614-01