REVISIONS			
LTR	**DESCRIPTION**	**DATE**	**APPROVED**
A	Page 3, 3.6.3, change 89056 to 89057. Page 3 – Dimensional clarifications. Editorial changes throughout.	18 Nov 92	Randy Larson
B	Page 3, Figure 1, Dimensional clarification. Editorial changes throughout.	12 Mar 99	Robert M. Heber
C	Added Government and industry web addresses, updated references, deleted paragraphs 3.7 and 3.7.1, revised paragraph 4. Editorial changes throughout.	06-01-27	Richard L. Taylor

REV																		
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REV STATUS	**REV**		C	C	C	C	C											
OF PAGES	**PAGE**		1	2	3	4	5											

PMIC G	**PREPARED BY** Ralph Antonelli, Jr.	**DEFENSE SUPPLY CENTER, COLUMBUS** **COLUMBUS, OHIO 43218-3990**
Original date of drawing 27 March 1991	CHECKED BY James P. Donohue APPROVED BY Charles W. Koeller	**TITLE** **CONTACT, ELECTRICAL, CONNECTOR, HIGH VOLTAGE, SOCKET, SIZE 8, STRAIGHT, SOLDER**
SIZE **A**	**CAGE CODE** **037Z3**	**DWG. NO.** **89055**
	REV **C**	**PAGE** **1** OF **5**

AMSC N/A

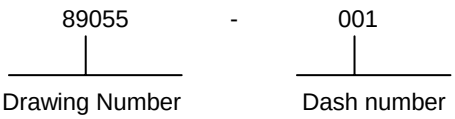
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1. SCOPE

1.1 Scope. This drawing covers the design and performance requirements for a high voltage, socket, size 8, straight, solder, electrical contact.

1.2 Part or Identifying Number (PIN). The complete PIN shall be as shown in the following example:



2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2).

DEPARTMENT OF DEFENSE SPECIFICATIONS

MIL-DTL-24308 - Connectors, Electrical, Rectangular, Miniature, Non-environmental, Polarized Shell, Rack and Panel
MIL-I-81969/14 - Installing and Removal Tools, Connector Electrical Contact, Type III, Class 2, Composition B

(Copies of these documents are available online at http://assist.daps.dla.mil/quicksearch/ or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.

2.1.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

DSCC Drawings

89054 - Contact, Electrical, Connector, High Voltage, Pin, Size 8, Straight, Solder
89057 - Contact, Electrical, Connector, High Voltage, Pin, Size 8, Right Angle, Solder

(Copies of DSCC drawings are available online at http://www.dscc.dla.mil/Programs/MilSpec/ or DSCC-VAI, Columbus, OH, 43218-3990, or telephone (614) 692-0576)

2.2 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the documents not listed in the DoDISS are the issues of the of the document cited in the solicitation (see 6.2).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM B 488 - Electrodeposited Coatings of Gold for Engineering Uses.

(Copies of these documents are available from http://www.astm.org/ or ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959.)

SOCIETY OF AUTOMOTIVE ENGINEERS (SAE)

SAE-AS39029 - Contacts, Electrical, Connector, General Specification for

(Copies of these documents are available online at http://www.sae.org or from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale PA, 15096-0001.)

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3. REQUIREMENTS

3.1 Design configuration. The design, construction, and physical dimensions shall be as specified in this drawing (see figure 1) and SAE-AS39029. In case of conflict between this drawing and SAE-AS39029, this drawing shall govern.

3.2 Design documentation. The design documentation shall be in accordance with SAE-AS39029 and be retained by the manufacturer, but be available for review by the contracting activity, DSCC, or contractor upon request.

3.3 Electrical performance characteristics. The electrical performance characteristics are as specified in table I herein, and apply over the entire operating temperature range as specified for type "A" contacts in SAE-AS39029.

TABLE I. Electrical characteristics.

Electrical characteristics	Value
Maximum current	5 amperes
Working voltage	500 V rms
Maximum voltage	2,000 V rms
Contact resistance (max)	0.01 ohm
Insulation resistance	5 gigohms

3.4 Marking. Marking shall be in accordance with SAE-AS39029 except the DSCC drawing PIN shall be used in place of the M39029 PIN.

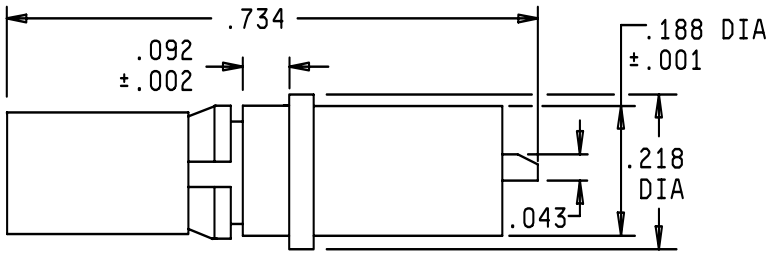
3.5 Quality assurance requirements. Contacts furnished under this drawing shall have been subjected to, and passed all the requirements, tests, and inspections detailed herein, including quality conformance inspection.

3.6 Environmental and mechanical performance characteristics. The environmental and mechanical performance characteristics are as specified for "type A" contacts in SAE-AS39029 and this drawing.

3.6.1 Tools. Installation tool is not required. Removal tool shall be M81969/14-06.

3.6.2 Contact plating. Overall contact plating shall be in accordance with ASTM B488, type II, code C, class 1.27.

3.6.3 Mating contact. The contact specified in this drawing shall be capable of mating with contacts specified in DSCC drawings 89054 and 89057.



Inches	mm	Inches	mm
.001	0.03	.188	4.78
.002	0.05	.218	5.54
.043	1.09	.734	18.64
.092	2.34		

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ±.005 (0.13 mm) for three-place decimals and ±.01 (0.3 mm) for two-place decimals.

FIGURE 1. Dimensions for contact power, size 8.

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4. VERIFICATION

4.1 Classification of inspections. The inspection requirements specified herein are classified as follows:

a. Qualification inspection (see 4.2)

b. Conformance inspection (see 4.3)

4.2 Qualification inspection. Qualification inspection for contacts specified in this document is not required.

4.3 Quality conformance inspection. Quality conformance inspection shall utilize sampling and testing methods which will assure all contacts supplied to this drawing will meet the inspection requirements of group B inspection of SAE-AS39029. Conforming test data shall be retained for a minimum of 3 years by the manufacturer, and be available at all times for inspection by appropriate qualification or customer personnel.

4.4 Certification. In order to be certified and listed as an approved source of supply for contacts manufactured to this drawing, a manufacturer shall:

a. Agree to make available to DSCC upon request, all pertinent test data on its production of the subject part.

b. Provide to DSCC-VAI or its designated agent, upon request, free of charge, and without obligation, a current sample from its production of the subject part.

c. Meet one of the following criteria:

1. Currently hold QPL status on MIL-DTL-24308 or SAE-AS39029.

2. Be in current production with subject part.

4.5 Certificate of compliance. A certificate of compliance shall be required from a manufacturer in order to be listed as an approved source (see 3.8 and 6.6).

5. PACKAGING

5.1 Packaging requirements. The requirements for packaging shall be in accordance with SAE-AS39029.

6. NOTES

6.1 Intended use. Contacts conforming to this drawing are intended for use when military specifications do not exist, and qualified military contacts that will perform the required function are not available for original equipment manufacturer's applications. This drawing is intended exclusively to prevent the proliferation of unnecessary duplicate specifications, drawings and stock catalog listing. When a military specification exists and the product covered by this drawing has been qualified for listing on qualified products list (QPL) 39029, this drawing will be inactivated and will not be used for new design. The QPL 39029 product shall be the preferred item for all applications.

6.2 Ordering data. The acquisition document should specify the following:

a. Complete PIN.

b. Requirements for delivery one copy of the quality conformance inspection (see 4.2) data pertinent to the contact inspection lot, to be supplied with each shipment by the contact manufacturer, if applicable.

c. Requirements for certificate of compliance (see 3.9), if applicable.

d. Requirements for packaging and packing (see 5.1).

6.3 Applicable connectors. These contacts can be used in connectors which reference DSCC drawing 85039.

6.4 Generic test data. Generic test data may be used to satisfy the requirements of 4.2. Generic test data shall be on date codes no more than 1 year old, with the same material, design, and manufacturing process. The vendor is required to retain the generic data for a period of not less than 3 years from the date of shipment.

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6.5 Comments. Comments on this drawing should be directed to DSCC-VAI, Columbus, OH, 43218-3990, or telephone (614) 692-0566 or email: RectangularConnectors@dscc.dla.mil.

6.6 Approved sources of supply. Approved sources of supply are listed herein. Additional sources will be added as they become available. The vendors listed have agreed to the contents of this drawing and a certificate of compliance has been submitted to DSCC-VAI.

DSCC drawing PIN	Vendor CAGE number	Vendor similar PIN 1/
89055-001	28198	FS4820D-50
	60563	15-1020-1001C

1/ Caution. Do not use this number for item acquisition. Items acquired to this number may not satisfy the performance requirements of this drawing.

Vendor CAGE number	Vendor name and address
28198	Positronics Industries, Incorporated 423 North Campbell Springfield, MO 65801-8247
60563	The Phoenix Company 555 Pond Drive Wood Dale IL 60191-1192

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