

REVISIONS																	
LTR	DESCRIPTION							DATE			APPROVED						
A	Add silver plated designs, and source 98291. Editorial changes throughout.							20 Sep 1988			Randy Larson						
B	Change PIN. Editorial changes throughout.							2 Mar 1992			Randy Larson						
C	Frequency range change. PIN change.							22 May 1995			Randy Larson						
D	PIN and source update.							16 November 2001			Robert M. Heber						
Prepared in accordance with MIL-STD-100																	
REV																	
PAGE																	
REV STATUS OF PAGES	REV	D	D	D	D	D											
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PMIC N/A		PREPARED BY Ron Gary						DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO 43216-5000									
Original date of drawing 17 December 1985		CHECKED BY C. W. Koeller						TITLE CONNECTOR, RECEPTACLE, ELECTRICAL, COAXIAL, RADIO FREQUENCY, SERIES SMC, PRINTED CIRCUIT BOARD MOUNT, STRAIGHT									
		APPROVED BY R. Larson															
		SIZE A	CAGE CODE 037Z3					DWG. NO. 85139									
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ENGINEERING DATA:

Nominal impedance: 50 ohms.

Frequency range: 0 to 10 GHz.

Voltage rating: 335 volts rms, maximum, at sea level, 85 volts rms, maximum at 70,000 feet.

Temperature rating: -65°C to +165°C.

REQUIREMENTS: Requirements of drawing 84148 are applicable.

Dimensions and configuration: See figure 1.

Force to engage and disengage:

Longitudinal force: 14 pounds maximum engage, 2 pounds minimum disengage.

Torque: Not applicable.

Coupling proof torque: Not applicable.

Inspection conditions: Not applicable.

Hermetic seal: Not applicable.

Leakage (pressurized connectors): Not applicable.

Insulation resistance: Method 302, test condition B, MIL-STD-202. 1,000 megohms, minimum.

Center contact retention:

Minimum axial force: 6.0 pounds from mating end; 4.0 pounds from opposite end.

Torque: 3 inch-ounce.

Solderability 1/: Method 208 of MIL-STD-202.

Salt spray (corrosion): Method 101, test condition B, MIL-STD-202.

Voltage standing wave ratio (VSWR): Not applicable.

Swept frequency VSWR test setup: Not applicable.

Connector durability:

Insertion and withdrawal force: 500 cycles, minimum at 12 cycles/minute, maximum. The mating force shall meet the mating characteristics requirements.

Initial: 14 pounds, minimum.

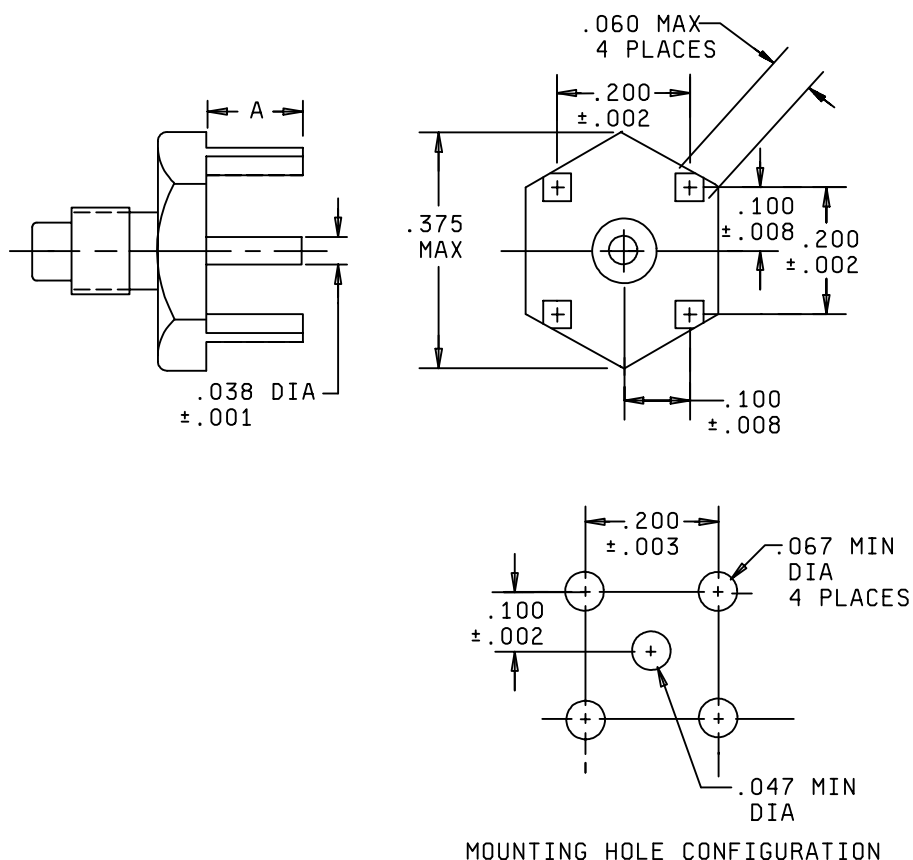
Final: 2 pounds, minimum disengagement.
14 pounds, maximum engage and disengage.

Contact resistance (milliohms, maximum):

	<u>Initial</u>	<u>After environment</u>
Center contact:	6.0	8.0
Outer contact:	1.0	1.5
Braid to body	Not applicable	Not applicable

1/ For quality conformance inspection, the test shall be performed in group B following VSWR.

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PIN	Dimension A
85139DBG-1	.155 (3.94) \pm .010 (0.25)
85139DBG-2	.125 (3.18) \pm .010 (0.25)
85139DBG-3	.093 (2.36) \pm .010 (0.25)
85139DBS-1	.155 (3.94) \pm .010 (0.25)
85139DBS-2	.125 (3.18) \pm .010 (0.25)
85139DBS-3	.093 (2.36) \pm .010 (0.25)

Inches	mm	Inches	mm
.001	0.02	.100	2.54
.002	0.05	.200	5.08
.003	0.08	.218	5.54
.008	0.20	.367	9.32
.020	0.51	.375	9.52
.038	0.97	.385	9.78
.047	1.19	.435	11.05
.060	1.52	.600	15.24
.067	1.70		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. All undimensioned pictorial representations are for reference purposes only.
4. Configuration optional. Dimension .375 (9.52 mm) is the maximum envelope diameter.

FIGURE 1. General configuration.

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Dielectric withstanding voltage: Method 301 of MIL-STD-202. 1,000 volts rms, at sea level.

Vibration, high frequency: MIL-STD-202, method 204, test condition D.

Shock (specified pulse): MIL-STD-202 method 213, test condition H.

Thermal shock: MIL-STD-202, method 107, test condition B.

Moisture resistance: Not applicable.

Corona level: Not applicable.

RF high potential withstanding voltage:

Voltage and frequency: 600 volts rms at 5 MHz.

Leakage current: Not applicable.

Cable retention force: Not applicable.

Coupling mechanism retention force: Not applicable.

RF leakage: Not applicable.

Insertion loss: Not applicable.

Part or Identifying Number (PIN): 85139DBG-1, 85139DBG-2, 85139DBG-3, 85139DBS-1, 85139DBS-2, and 85139DBS-3 (see table I).

TABLE I. Cross-reference of PINs.

Preferred PIN <u>1/</u>	Superseded PIN <u>1/</u>
85139DBG-1	85139DBGN-1
85139DBG-2	85139DBGN-2
85139DBG-3	85139DBGN-3

1/ Superseded parts may be used until stock is exhausted. New part number marking is effective as of 20 September 1988.

Note: These parts are for use in general radio frequency applications.

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

DSCC drawing PIN 1/	Vendor CAGE number	Vendor reference PIN
85139DBG-1	00795 24931 95077	2568000G00E-000 37JR104-6 2285-0001
85139DBG-2	00795 24931 95077	2568000G00E-001 37JR104-4 2285-0015
85139DBG-3	00795 24931 95077	2568000G00E-002 37JR104-5 2285-0016
85139DBS-1	00795	2568000A00E-000
85139DBS-2	00795	2568000A00E-001
85139DBS-3	00795	2568000A00E-002

1/ Parts must be purchased to this DSCC PIN to assure that all performance requirements and tests are met.

Vendor CAGE
number

00795

24931

95077

Vendor name
and address

Delta Electronics
416 Cabot Street
Beverly, MA 01915

Specialty Connector Co.
2100 Earlywood Dr.
Franklin, IN 46131

Soliton/Vector Microwave Products
3301 Electronics Way
West Palm Beach, FL 33407

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CAGE CODE

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