FEDERAL SUPPLY CLASS
5935

RATIONALE

THIS DOCUMENT HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE 5-YEAR REVIEW POLICY.

NOTICE

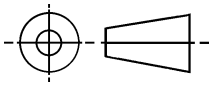
THIS DOCUMENT HAS BEEN TAKEN DIRECTLY FROM U.S. MILITARY SPECIFICATION MIL-C-39029/84D(EC) AND CONTAINS ONLY MINOR EDITORIAL AND FORMAT CHANGES REQUIRED TO BRING IT INTO CONFORMANCE WITH THE PUBLISHING REQUIREMENTS OF SAE TECHNICAL STANDARDS. THE INITIAL RELEASE OF THIS DOCUMENT IS INTENDED TO REPLACE MIL-C-39029/84D(EC). ANY PART NUMBERS ESTABLISHED BY THE ORIGINAL SPECIFICATION REMAIN UNCHANGED.

THE ORIGINAL MILITARY SPECIFICATION WAS ADOPTED AS AN SAE STANDARD UNDER THE PROVISIONS OF THE SAE TECHNICAL STANDARDS BOARD (TSB) RULES AND REGULATIONS (TSB 001) PERTAINING TO ACCELERATED ADOPTION OF GOVERNMENT SPECIFICATIONS AND STANDARDS. TSB RULES PROVIDE FOR (A) THE PUBLICATION OF PORTIONS OF UNREVISED GOVERNMENT SPECIFICATIONS AND STANDARDS WITHOUT CONSENSUS VOTING AT THE SAE COMMITTEE LEVEL, AND (B) THE USE OF THE EXISTING GOVERNMENT SPECIFICATION OR STANDARD FORMAT.

UNDER DEPARTMENT OF DEFENSE POLICIES AND PROCEDURES, ANY QUALIFICATION REQUIREMENTS AND ASSOCIATED QUALIFIED PRODUCTS LISTS ARE MANDATORY FOR DOD CONTRACTS. ANY REQUIREMENT RELATING TO QUALIFIED PRODUCTS LISTS (QPL'S) HAS NOT BEEN ADOPTED BY SAE AND IS NOT PART OF THIS SAE TECHNICAL DOCUMENT.

ISSUED 2000-07
REAFFIRMED 2006-10

THIRD ANGLE PROJECTION



PREPARED BY SAE SUBCOMMITTEE AE-8C1

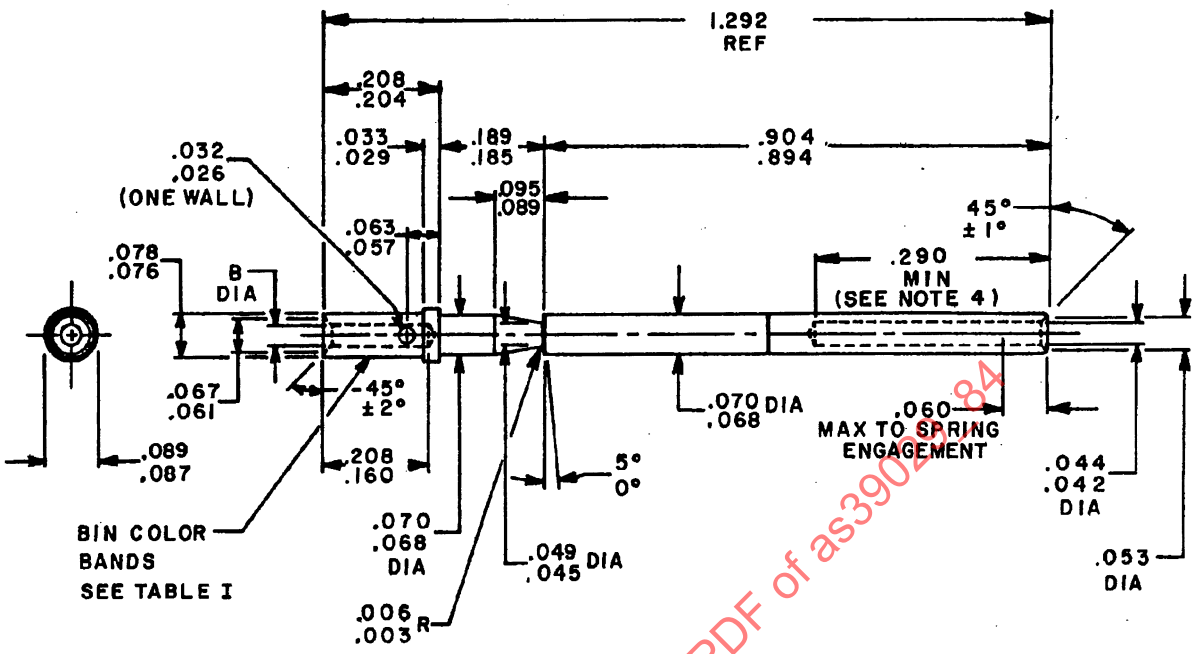
SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

CONTACTS, ELECTRICAL CONNECTOR,
SOCKET, CRIMP REMOVABLE
(FOR MIL-C-28840 CONNECTORS)

AS39029/84
SHEET 1 OF 4

THE COMPLETE REQUIREMENTS FOR ACQUIRING THE CONTACTS DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION AND THE LATEST ISSUE OF MIL-C-39029.



INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM
.003	0.08	.045	1.14	.068	1.73	.185	4.70
.006	0.15	.049	1.24	.070	1.78	.189	4.80
.026	0.66	.053	1.35	.076	1.93	.204	5.18
.029	0.74	.057	1.45	.078	1.98	.208	5.28
.032	0.81	.060	1.52	.087	2.21	.380	9.65
.033	0.84	.061	1.55	.089	2.26	.390	9.91
.042	1.07	.063	1.60	.095	2.41	.894	22.71
.044	1.12	.067	1.70	.160	4.06	.904	22.96
						1.292	32.82

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Dimensions apply after plating.
4. Contact engagement area for localized finish option.

FIGURE 1. DIMENSIONS AND CONFIGURATION.

REQUIREMENTS:

Dimensions, design characteristics, and configuration: See figure 1 and table I.

Tools: See table II.

Localized finish option: Applicable. Contacts shall be finished as specified in the localized finish requirements of MIL-C-39029. The 0.290 inch minimum length requirement in the figure is the “F” length of the area “X” specified in MIL-C-39029 for contacts having separate pressure members. Nickel underplate is required.

Vibration: Method 2005 of MIL-STD-1344, test condition III. Following the test, the contacts shall be tested for endurance in accordance with MIL-STD-167/1.

High impact shock: High impact shock test shall be conducted in accordance with MIL-C-28840, using a MIL-C-28840 qualified connector that has been approved for listing on the applicable qualified products list.

Mating contact: MIL-C-39029/83.

QPL evaluating activity: Naval Weapons Support Center, Crane, Indiana 47522.

Porosity test (localized finish): If localized finish is used, porosity shall be tested in accordance with method 1017 of MIL-STD-1344. Immersion in nitric acid is not applicable.

TABLE I. DESIGN CHARACTERISTICS.

BIN code	B dia.	Color bands			Mating end size	Wire barrel size	Type	Class	C 1/ dia.
		1st	2nd	3rd					
509	.050 .048	Green	Black	White	20	20	A	B	.032 .026
452	.0355 .0335	Yellow	Green	Red	20	22	A	B	.032 .026
453	.0200 .0180	Yellow	Green	Orange	20	28	A	B	.022 .018

1/ Hole - one wall.

TABLE II. TOOLS.

BIN code	Basic crimping tool	Positioner	Installing tool	Removal tool
509	M22520/34-01	M22520/34-02	M81969/33-01	M81969/34-01
452	M22520/34-01	M22520/34-02	M81969/33-01	M81969/34-01
453	M22520/34-01	M22520/34-02	M81969/33-01	M81969/34-01

Military part number: The military part number shall be in accordance with table III.

TABLE III. MILITARY PART NUMBER.

BIN code	Military part number	Supersedes part number
509	M39029/84-509	
452	M39029/84-452	M39029/84-20-22
453	M39029/84-453	M39029/84-20-28

Low signal level contact resistance (type A): See table IV.

Contact resistance (type A) with silver plated wire: See table V.

Tensile strength (type A): See table VI.

TABLE IV. LOW SIGNAL LEVEL CONTACT RESISTANCE (TYPE A).

Mating end size	Wire barrel size	Wire size	Maximum contact resistance (milliohms)	
			Initial	After conditioning
20	22	22 26	15 31	17 38
20	28	28 30	50 75	60 88