

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

AS39029/107

FEDERAL SUPPLY CLASS
5935

NOTICE

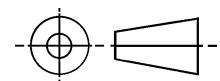
THIS DOCUMENT HAS BEEN TAKEN DIRECTLY FROM U.S. MILITARY SPECIFICATION MIL-C-39029/107A AND CONTAINS ONLY MINOR EDITORIAL AND FORMAT CHANGES REQUIRED TO BRING IT INTO CONFORMANCE WITH THE PUBLISHING REQUIREMENTS OF SAE TECHNICAL STANDARDS. THE INITIAL RELEASE OF THIS DOCUMENT IS INTENDED TO REPLACE MIL-C-39029/107A. 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.

SAENORM.COM : Click to view the full PDF of as39029_107

THIRD ANGLE PROJECTION



ISSUED 2001-03

PREPARED BY SAE SUBCOMMITTEE AE-8C1

SAE The Engineering Society
For Advancing Mobility
INTERNATIONAL
Land Sea Air and Space®
400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE STANDARD

CONTACTS, ELECTRICAL CONNECTOR, PIN,
CRIMP REMOVABLE, (FOR MIL-C-38999 SERIES I, III
AND IV AND MIL-C-29600 SERIES A CONNECTORS)

AS39029/107
SHEET 1 OF 5



1. Dimensions are in inches unless otherwise specified.
2. Metric equivalents are based upon 1 inch = 25.4 mm.
3. Dimensions apply after plating.
4. For BIN-614 only, diameters E and G shall be concentric within .003 full indicator movement (FIM) regardless of feature size S; for all other contact sizes, diameters E and G to be concentric within .001 FIM of maximum material condition M.
5. Manufacturers trademark per AIR-1351.

TABLE I. DIMENSIONS.

BIN Code	A Radius	BØ	CØ	DØ	EØ	FØ	GØ	H	K	M	Q	R	S	T Ref
620	.020	.0305	.062	.022	.0355	.011	.048	.005	.157	--	.022	.046	.237	.531
	.010	.0295	.060	.018	.0335	Max	.046	.003	.141	--	.018	.018	.231	
621	.025	.041	.094	.032	.048	.015	.070	.010	.229	.078	.032	.063	.237	.531
	.015	.039	.091	.026	.046	Max	.068	.005	.209	.072	.026	.026	.231	
622	.025	.0635	.130	.042	.068	.030	.103	.010	.229	.088	.042	.073	.237	.531
	.020	.0616	.127	.036	.066	.011	.101	.005	.209	.082	.030	.036	.231	
623	.025	.095	.182	.042	.102	.062	.151	.016	.229	.088	.042	.073	.237	.531
	.020	.093	.179	.036	.098	.043	.148	.005	.209	.082	.030	.036	.231	
624	.025	.126	.242	.052	.140	.094	.213	.016	.385	.115	N/A	N/A	.405	.647
	.020	.124	.238	.040	.134	.074	.207	.005	.355	.108			.395	

Inches	mm	Inches	mm	Inches	mm	Inches	mm
.003	.0762	.041	1.041	.091	2.311	.157	3.988
.005	.1270	.042	1.067	.093	2.362	.179	4.547
.010	.2540	.043	1.092	.094	2.388	.182	4.623
.011	.2794	.046	1.168	.095	2.413	.207	5.258
.015	.3810	.048	1.219	.098	2.489	.209	5.309
.016	.4064	.060	1.524	.101	2.565	.213	5.410
.018	.4572	.0616	1.565	.102	2.591	.229	5.817
.020	.5080	.062	1.575	.103	2.616	.231	5.867
.022	.5588	.063	1.600	.108	2.743	.237	6.020
.025	.6350	.0635	1.613	.115	2.921	.238	6.045
.026	.6604	.066	1.676	.124	3.150	.242	6.147
.0295	.7493	.068	1.727	.126	3.200	.252	6.401
.030	.7620	.070	1.778	.127	3.226	.355	9.017
.0305	.7747	.072	1.829	.130	3.302	.385	9.779
.032	.8128	.073	1.854	.134	3.404	.395	10.033
.0335	.8509	.074	1.880	.140	3.556	.405	10.287
.0355	.9017	.078	1.981	.141	3.581	.531	13.49
.036	.9144	.082	2.083	.148	3.759	.647	16.434
.039	.9906	.088	2.235	.151	3.835		
.040	1.016						

AEROSPACE STANDARD

CONTACTS, ELECTRICAL CONNECTOR, PIN,
CRIMP REMOVABLE, (FOR MIL-C-38999 SERIES I, III
AND IV AND MIL-C-29600 SERIES A CONNECTORS)

TABLE II. DESIGN CHARACTERISTICS.

BIN code	Color bands			Mating end size	Wire barrel size	Type	Class
	1st	2nd	3rd				
620	Blue	Red	Black	22	22D	A	B
621	Blue	Red	Brown	20	20		
622	Blue	Red	Red	16	16		
623	Blue	Red	Orange	12	12		
624	Blue	Red	Yellow	10	10		

TABLE III. TOOLS.

Wire barrel size	Basic crimping tool	Positioner	Installing tool	Removal tool
22D	M22520/2-01 M22520/7-01	M22520/2-09 M22520/7-07	M81969/14-01 M81969/8-01	M81969/14-01 M81969/8-02
20	M22520/1-01 M22520/2-01 M22520/7-01	M22520/1-04 Red M22520/2-10 M22520/7-08	M81969/14-10 M81969/8-05	M81969/14-10 M81969/8-06
16	M22520/1-01 M22520/7-01	M22520/1-04 Blue M22520/7-04	M81969/8-07 M81969/14-03	M81969/8-08 M81969/14-03
12	M22520/1-01	M22520/1-04 Yellow	M81969/14-04 M81969/8-09	M81969/14-04 M81969/8-10
10	M22520/XX <u>1/</u>	M22520/XX <u>1/</u>	M81969/8-XX <u>1/</u> M81969/14-05	M81969/8-YY <u>1/</u> M81969/14-05

1/ To be determined

REQUIREMENTS:

Contacts shall comply with reliability assurance provisions of MIL-STD-790 as specified in MIL-C-38999.

Dimensions: See Figure 1 and Table I.

Design characteristics and configuration: See Figure 1 and Table II.

Tools: See Table III.

Mating contacts: MIL-C-39029/106.

Durability: 1500 cycles.