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-39029/92B 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-39029/92B. 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.

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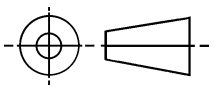
ISSUED 2000-07 REAFFIRMED 2006-08

THIRD ANGLE PROJECTION



PREPARED BY SAE SUBCOMMITTEE AE-8C1

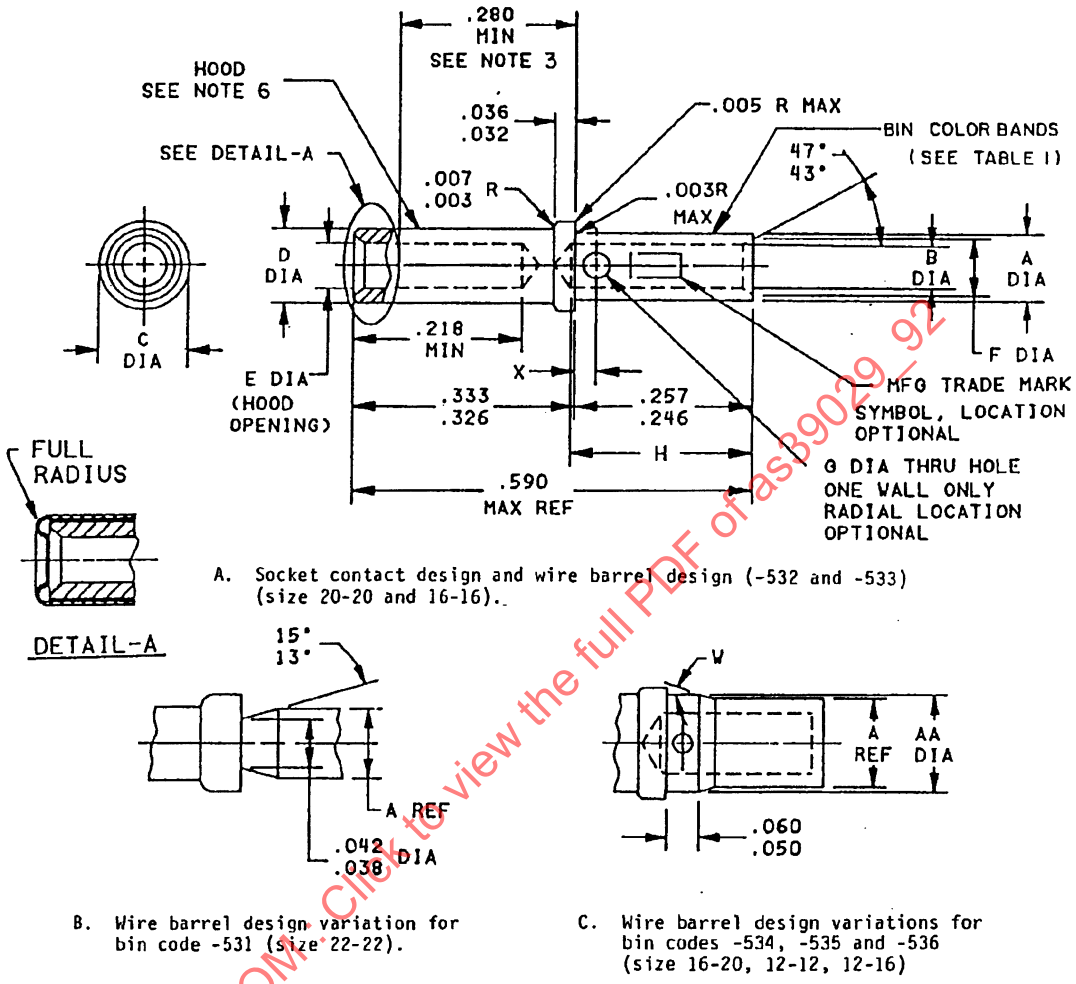
SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

CONTACTS, ELECTRICAL CONNECTOR, SOCKET, CRIMP REMOVABLE (FOR MIL-R-6106 AND MIL-S-12883/40 AND /41 RELAY SOCKETS)

AS39029/92
SHEET 1 OF 5

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) SPECIFIED IN THE SOLICITATION: MIL-C-39029.



A. Socket contact design and wire barrel design (-532 and -533) (size 20-20 and 16-16).

B. Wire barrel design variation for bin code -531 (size 22-22).

C. Wire barrel design variations for bin codes -534, -535 and -536 (size 16-20, 12-12, 12-16)

FIGURE 1. SOCKET CONTACT DESIGN AND WIRE BARREL DESIGN VARIATION.

Inches	mm	Inches	mm	Inches	mm	Inches	mm
.003	0.08	.042	1.07	.0930	2.362	.155	3.94
.004	0.10	.043	1.09	.0950	2.413	.158	4.01
.005	0.13	.047	1.19	.0955	2.426	.161	4.09
.007	0.18	.048	1.22	.098	2.49	.187	4.75
.010	0.25	.050	1.27	.100	2.54	.190	4.83
.017	0.43	.051	1.30	.101	2.57	.218	5.54
.020	0.51	.053	1.35	.102	2.59	.246	6.25
.022	0.56	.060	1.52	.103	2.62	.250	6.35
.026	0.66	.0615	1.562	.113	2.87	.257	6.53
.0295	0.749	.062	1.57	.120	3.05	.280	7.11
.0305	0.775	.0635	1.613	.126	3.20	.284	7.21
.0315	0.800	.066	1.68	.130	3.30	.326	8.28
.032	0.81	.068	1.73	.133	3.38	.333	8.46
.036	0.91	.073	1.85	.136	3.45	.590	14.99
.038	0.97	.076	1.93	.140	3.56	14.	356.
.0390	0.991	.078	1.98	.146	3.71	16.	406.
.040	1.02	.083	2.11	.148	3.76	44.	1118.
.0410	1.041	.089	2.26	.151	3.84	46.	1168.
.0415	1.054						

Dimensions.

Bin code	A Dia	B Dia	C Dia	D Max Dia	E Min Dia	F Dia	G Dia	H	W	X	AA
531	.053 .051	.038 .036	.076 .073	.0615	.0315	.047 .043	.022 .017	.140 .120	---	.146 .126	---
532	.078 .076	.050 .048	.103 .100	.078	.0415	.066 .062	.032 .026	.284 .250	---	.040 .020	---
533	.103 .101	.068 .066	.133 .130	.113	.0635	.089 .083	.042 .036	.284 .250	---	.040 .020	---
534	.078 .076	.050 .048	.133 .130	.113	.0635	.066 .062	.032 .026	.284 .250	46 44	.040 .020	.103 .101
535	.151 .148	.102 .098	.190 .187	.161	.0955	.136 .130	.042 .036	.284 .250	16 14	.040 .020	.158 .155
536	.103 .101	.068 .066	.190 .187	.161	.0955	.089 .083	.042 .036	.284 .250	46 44	.040 .020	.158 .155

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Distance between rear of contact shoulder and point at which a gauge pin, of same basic diameter as mating pin contact and square face, first engages socket contact spring member.
4. Diameters to be concentric within .004 FIM.
5. Dimensions shown apply after plating.
6. Maximum gap of .010 inch between hood and body of the contact.

FIGURE 1. SOCKET CONTACT DESIGN AND WIRE BARREL DESIGN VARIATION - CONTINUED.

REQUIREMENTS:

Qualification:

Electrical contact shall be tested using a relay and relay socket in accordance with MIL-S-12883/40 and MIL-S-12883/41 (latest revision).

Design and construction: See figure 1 and table I.

TABLE I. DESIGN CHARACTERISTICS.

Bin code	Color band 1/ 1st	2nd	3rd	Mating end size	Wire barrel size	Type	Class
531	Green	Orange	Brown	22	22		
532	"	"	Red	20	20		
533	"	"	Orange	16	16	A	A
534	"	"	Yellow	16	20		
535	"	"	Green	12	12		
536	"	"	Blue	12	16		

1/ See MIL-C-39029 for marking options.

ELECTRICAL:

Mating electrical contact: Relay pin, see MIL-S-12883/40 and MIL-S-12883/41 for part or identifying number (PIN).

Current rating (maximum): Operating current shall be determined by derating for intended applications (see table II).

TABLE II. CURRENT RATING (MAXIMUM RMS).

Bin code	Max (rms)	Bin code	Max (rms)
-531	5 amps	-534	7.5 amps
-532	7.5 amps	-535	23 amps
-533	10 amps	-536	10 amps

ENVIRONMENTAL:

Temperature range: -70°C to +125°C.

MECHANICAL:

Vibration (sinusoidal): In accordance with MIL-STD-202, method 204, condition G with the following exceptions:

a. The frequency range shall be varied logarithmically between the limits of 10 and 3,000 Hz.
b. The procedure of MIL-STD-202, method 201 may be applied during 10 to 55 Hz band of the vibration frequency range.