FEDERAL SUPPLY CLASS
5935

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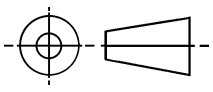
ISSUED 2000-07 REAFFIRMED 2008-04

THIRD ANGLE PROJECTION



PREPARED BY SAE SUBCOMMITTEE AE-8C1

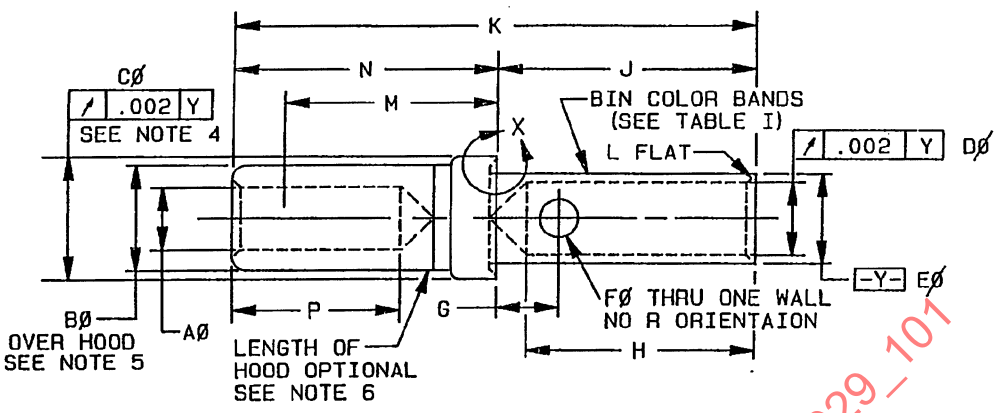
SAE Aerospace
An SAE International Group

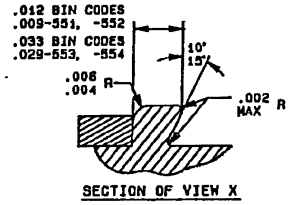
AEROSPACE STANDARD

CONTACTS, ELECTRICAL CONNECTOR, SOCKET, CRIMP REMOVABLE (FOR MIL-S-12883/44, MIL-S-12883/45, MIL-S-12883/46, AND MIL-R-6106/23 RELAY)

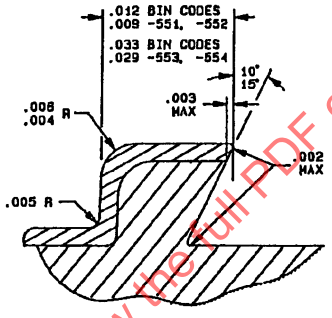
AS39029/101
SHEET 1 OF 6

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.

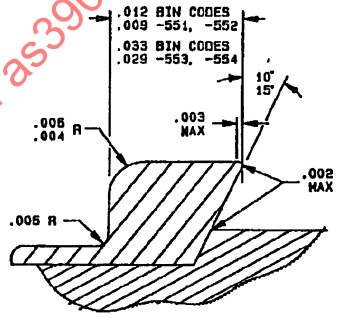




SECTION OF VIEW X



OPTIONAL DESIGN
SECTION OF VIEW X



OPTIONAL DESIGN
SECTION OF VIEW X

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Dimensions shown apply after plating.
4. Distance between rear of contact shoulder and point at which a gauge pin, of same basic diameter as mating pin contact and a square face, first engages socket contact spring member.
5. Aø is the closed entry of socket hood.
6. Maximum gap of .010 inch (0.25 mm) between hood and body of the contact.

Inches	mm	Inches	mm	Inches	mm
.002	0.05	.0390	0.991	.0835	2.121
.003	0.08	.0400	1.016	.0855	2.172
.004	0.10	.0410	1.041	.091	2.31
.005	0.13	.042	1.07	.094	2.39
.006	0.15	.0420	1.066	.101	2.57
.009	0.23	.044	1.12	.103	2.62
.012	0.30	.046	1.17	.108	2.74
.018	0.46	.0465	1.181	.120	3.05
.0180	0.457	.048	1.22	.127	3.23
.0200	0.508	.0480	1.219	.130	3.30
.022	0.56	.570	1.448	.137	3.48
.023	0.58	.0590	1.499	.139	3.53
.027	0.69	.060	1.52	.145	3.68
.029	0.74	.0600	1.524	.150	3.81
.0290	0.737	.0610	1.549	.158	4.01
.031	0.79	.0615	1.562	.160	4.06
.0310	0.787	.0630	1.600	.166	4.22
.0320	0.813	.064	1.63	.170	4.32
.033	0.84	.066	1.68	.175	4.44
.0335	0.851	.068	1.73	.180	4.57
.0340	0.864	.070	1.78	.188	4.78
.0355	0.902	.076	1.93	.327	8.31
				.349	8.86

Dimensions.

BIN code	A dia	B max dia	C dia	D dia	E dia	F dia	G	H	J	K ref	L flat	M min	N	P
551	.033	.060	.0615	.0200	.0480	.022	.025	.175	.170	.327	.016	.130	.166	.137
	.031		.0600	.0180	.0465	.018	.021	.160	.160		.0125		.158	.120
552	.033	.060	.0615	.0355	.0480	.022	.025	.175	.170	.327	.008	.130	.166	.137
	.031		.0600	.0335	.0465	.018	.021	.160	.160		.0045		.158	.120
553	.044	.076	.094	.048	.070	.027	.025	.175	.170	.349	.013	.150	.188	.137
	.042		.091	.046	.068	.023	.021	.160	.160		.009		.180	.120
554	.066	.108	.130	.068	.103	.027	.025	.175	.170	.349	.0195	.150	.188	.137
	.064		.127	.066	.101	.023	.021	.160	.160		.0155		.180	.120

FIGURE 1. SOCKET CONTACT - CONTINUED.

REQUIREMENTS:

Qualification:

The (socket) contact shall be tested on a fully configured relay socket with the applicable MIL-R-6106 relay used as mating plug or pin. (See MIL-S-12883/44, MIL-S-12883/45, MIL-S-12883/46, or MIL-R-6106/23 for applicable mating relay).

Design, construction, and physical dimensions: See figure 1 and table 1.

TABLE I. DESIGN CHARACTERISTICS.

BIN code	Color bands			Mating end size (ref)	Wire barrel size	Type	Class
	1st	2nd	3rd				
551	Green	Green	Brown	22	28	A	A
552	Green	Green	Red	22	22		
553	Green	Green	Orange	20	20		
554	Green	Green	Yellow	16	16		

Electrical performance:

Mating electrical contact: Relay pin (see applicable MIL-R-6106 specification sheet).

Environmental performance:

Temperature range: -70°C to +125°C.

Mechanical performance:

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 10-55 Hz band of the vibration frequency.

Vibration (random): In accordance with MIL-STD-202, method 214, $0.4g^2$ Hz, test condition IG, duration 15 minutes each plane.

Mechanical shock: Perform as specified in MIL-STD-202, method 213, condition C, except peak value shall be 200 g's.

Insertion and withdrawal force: The insertion and withdrawal forces shall be as specified in table IX of MIL-C-39029, except for M39029/101-553 and -554 (see table II). Gauge pin diameters shall conform to the dimensions in table II in lieu of those specified in MS3197.