

**REV.
B**

AS39029/26

RATIONALE

REVISE TO IMPROVE DRAWING/DIMENSION QUALITY, UPDATE REFERENCES, REMOVE COMMERCIAL CABLE PART NUMBERS, ALIGN SPECIFICATION WITH SAE GUIDELINES, AND REVIEW SPECIFICATION FOR KNOWN TECHNICAL PROBLEMS.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS39029.

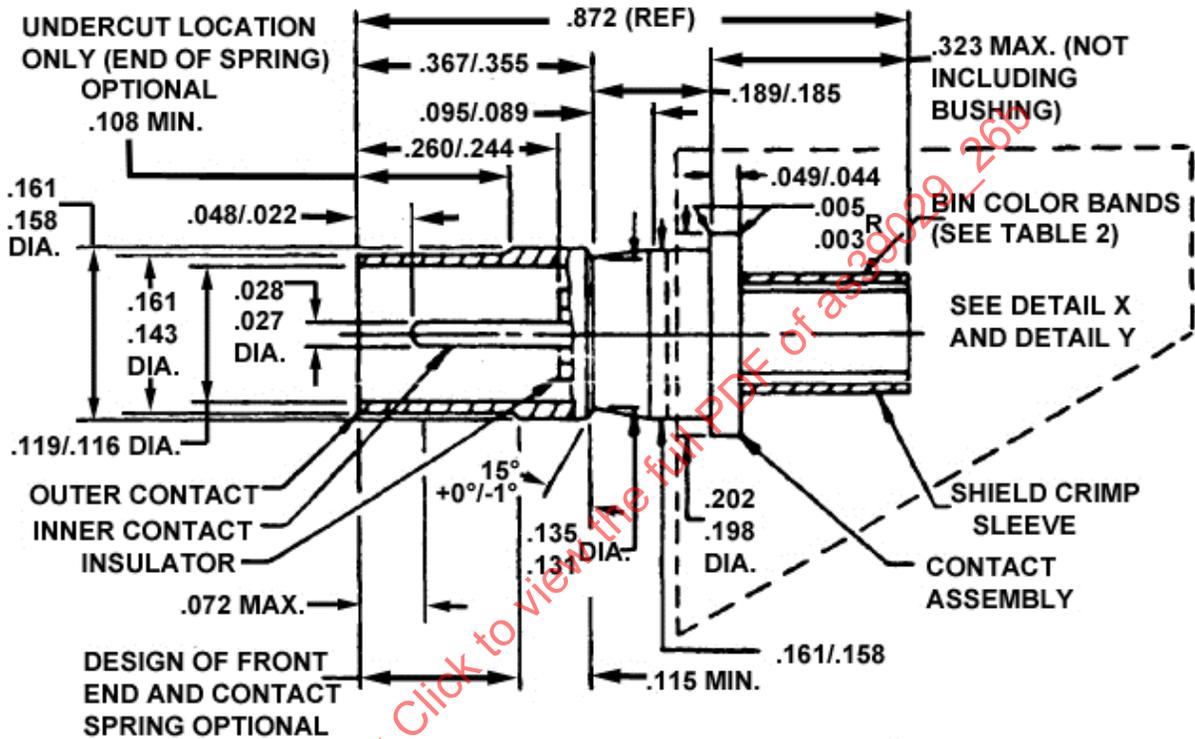
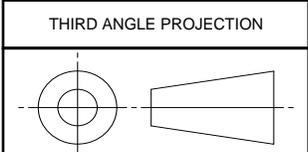


FIGURE 1 - AS39029/26 SHIELDED SOCKET CONTACT

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CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS39029



AEROSPACE STANDARD

(R) CONTACTS, ELECTRICAL CONNECTOR, SOCKET, CRIMP REMOVABLE, SHIELDED (FOR MIL-DTL-26482 SERIES 1 CONNECTORS)

AS39029/26
SHEET 1 OF 7

**REV.
B**

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ISSUED 2001-03 REVISED 2013-10

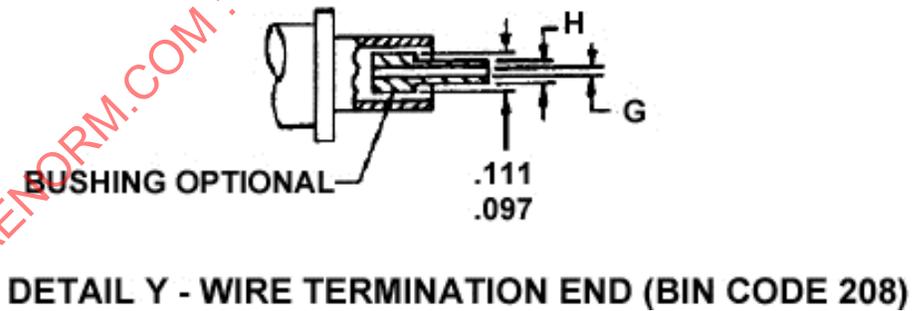
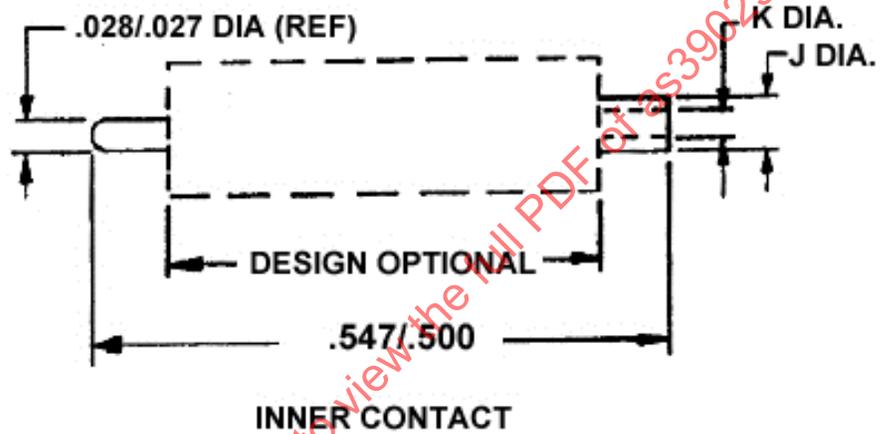
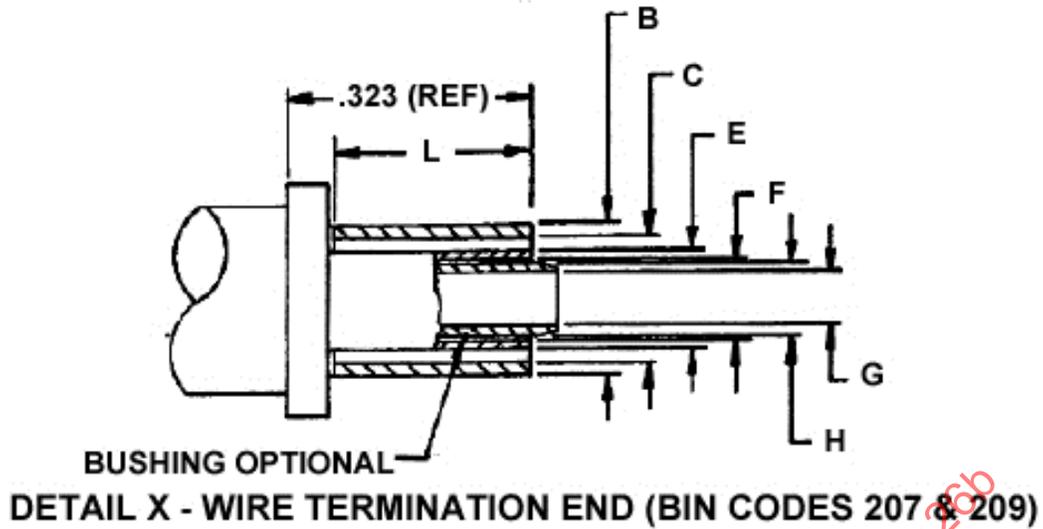


FIGURE 1 - AS39029/26 SHIELDED SOCKET CONTACT (CONTINUED)



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AS39029/26
 SHEET 2 OF 7

REV.
B

TABLE 1 - FIGURE 1 DIMENSIONS (METRIC EQUIVALENTS)

INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM
.003	0.076	.048	1.22	.108	2.74	.135	3.43	.198	5.03	.367	9.32
.005	0.127	.049	1.24	.111	2.82	.143	3.63	.202	5.13	.500	12.70
.022	0.559	.072	1.83	.115	2.92	.158	4.01	.244	6.20	.547	13.89
.027	0.686	.089	2.26	.116	2.95	.161	4.09	.260	6.60	.872	22.15
.028	0.711	.095	2.41	.119	3.02	.185	4.70	.323	8.20		
.044	1.12	.097	2.46	.131	3.33	.189	4.80	.355	9.02		

TABLE 2 - CONTACT DIMENSIONS

BIN CODE	B	C	E	F	G	H	J	K	L
207	.201	.161	.136	.1150	.069	.106	.055	.030	.270
	(5.11)	(4.09)	(3.45)	(2.92)	(1.75)	(2.69)	(1.40)	(0.762)	(6.86)
	.189	.151	.126	.1065	.065	.102	.045	.020	.230
	(4.80)	(3.84)	(3.20)	(2.71)	(1.65)	(2.59)	(1.14)	(0.508)	(5.84)
208	N/A	N/A	.136	.1150	.047	.076	.055	.030	.330
			(3.45)	(2.92)	(1.19)	(1.93)	(1.40)	(0.762)	(8.38)
			.126	.1065	.037	.066	.045	.020	.290
		(3.20)	(2.71)	(.94)	(1.68)	(1.14)	(0.508)	(7.37)	
209	.201	.161	.136	.1150	.058	.106	.067	.044	.270
	(5.11)	(4.09)	(3.45)	(2.92)	(1.47)	(2.69)	(1.70)	(1.12)	(6.86)
	.189	.151	.126	.1065	.055	.102	.057	.034	.230
	(4.80)	(3.84)	(3.20)	(2.71)	(1.40)	(2.59)	(1.45)	(0.864)	(5.84)

TABLE 3 - MARKING AND DESIGN CHARACTERISTICS

BIN CODE	COLOR BANDS			CONTACT CAVITY SIZE	TYPE	CLASS
	1ST	2ND	3RD			
207	RED	BLACK	VIOLET	12	D	A
208	RED	BLACK	GRAY	12		
209	RED	BLACK	WHITE	12		

TABLE 4 - TOOL REQUIREMENTS

BIN CODE	INNER CONTACT		SHIELD CRIMP SLEEVE		INSTALLING TOOL	REMOVAL TOOL
	BASIC CRIMPING TOOL	POSITIONER	BASIC CRIMPING TOOL	DIES		
207	M22520/2-01	M22520/2-32	M22520/5-01	M22520/5-10	M81969/17-05	M81969/19-09
208	M22520/2-01	M22520/2-32	---	---	M81969/17-05	M81969/19-09
209	M22520/2-01	M22520/2-32	M22520/5-01	M22520/5-10	M81969/17-05	M81969/19-09



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AS39029/26
SHEET 3 OF 7

REV. B

TABLE 5 - PART NUMBERS

AS39029 PART NUMBER	BIN CODE	SUPERSEDED PART NUMBER(S)
M39029/26-207	207	M39029/26-01
M39029/26-208	208	M39029/26-02
M39029/26-209	209	M39029/26-03

TABLE 6 - CONTACT ENGAGEMENT AND SEPARATION FORCES

TEST PIN DIAMETER (INCHES)	SOCKET CONTACT ONLY					
	INITIAL			AFTER CONDITIONING		
	MINIMUM SEPARATION FORCE (OZ)	MAXIMUM AVERAGE ENGAGEMENT FORCE (OZ)	MAXIMUM ENGAGEMENT FORCE (OZ)	MINIMUM SEPARATION FORCE (OZ)	MAXIMUM AVERAGE ENGAGEMENT FORCE (OZ)	MAXIMUM ENGAGEMENT FORCE (OZ)
.1140 +.0002 -.0000	N/A	N/A	30	N/A	N/A	36
.1120 +.0000 -.0002	3	N/A	N/A	2	N/A	N/A

TABLE 7 - CONTACT TENSILE STRENGTH (INNER AND OUTER CRIMP JOINT)

BIN CODE	CABLE ACCOMMODATION	AXIAL LOAD (POUND MINIMUM)	
		INNER CONTACT	OUTER CONTACT
207	M17/119-RG174 1/	15	15
	M17/94-RG179	3.5	15
	M17/113-RG316	10	10
208	M17/93-RG178	3.5	10
209 3/	2/	15	15

1/ NOT RECOMMENDED FOR USE. THE MAXIMUM OPERATING TEMPERATURE OF THE RG174 CABLE IS 85° +3°/-0 °C

2/ NO KNOWN STANDARD CABLE IS AVAILABLE FOR THIS BIN CODE TO REPLACE THE PREVIOUSLY RECOMMENDED COMMERCIAL CABLE OR THE CABLES ARE NO LONGER MANUFACTURED. STANDARD TOOLS MAY NOT APPLY. FOLLOW CONTACT SUPPLIERS INSTRUCTIONS.

3/ NOT RECOMMENDED FOR USE.



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AS39029/26
SHEET 4 OF 7

REV.
B

TABLE 8 - CONTACT RESISTANCE

BIN CODE	CONTACT	CABLE ACCOMMODATED	TEST CURRENT (AMPERES)	MAXIMUM VOLTAGE DROP (MILLIVOLTS)					
				25 °C +3 °C, -0 °C		25 °C +3 °C, -0 °C		150 °C +3 °C, -0 °C	
				MAX	MAX. AVG.	AFTER CONDITIONING		MAX	MAX. AVG.
207	INNER OUTER	M17/119-RG174 <u>1/</u>	1 12	55 85	N/A	66 102	N/A	88 136	N/A
	INNER OUTER	M17/94-RG179	1 12	120 70		144 84		192 112	
	INNER OUTER	M17/113-RG316	1 12	55 75		66 90		88 120	
208	INNER OUTER	M17/93-RG178	1 12	120 110		144 132		192 176	
209 <u>3/</u>	INNER OUTER	<u>2/</u>	1 12	10 60		12 72		16 96	

- 1/ NOT RECOMMENDED FOR USE. THE MAXIMUM OPERATING TEMPERATURE OF THE RG174 CABLE IS 85° +3°/-0 °C
2/ NO KNOWN STANDARD CABLE IS AVAILABLE FOR THIS BIN CODE TO REPLACE THE PREVIOUSLY RECOMMENDED COMMERCIAL CABLE OR THE CABLES ARE NO LONGER MANUFACTURED. STANDARD TOOLS MAY NOT APPLY. FOLLOW CONTACT SUPPLIERS INSTRUCTIONS.
3/ NOT RECOMMENDED FOR USE.

TABLE 9 - LOW SIGNAL CONTACT RESISTANCE (INTER CONTACT ONLY)

BIN CODE	CABLE ACCOMMODATION	MAXIMUM CONTACT RESISTANCE (MILLIOHMS)	
		INITIAL	AFTER CONDITIONING
207	M17/119-RG174 <u>1/</u>	55	66
	M17/94-RG179	120	144
	M17/113-RG316	55	66
208	M17/93-RG178	120	144
209 <u>3/</u>	<u>2/</u>	10	12

- 1/ NOT RECOMMENDED FOR USE. THE MAXIMUM OPERATING TEMPERATURE OF THE RG174 CABLE IS 85° +3°/-0 °C
2/ NO KNOWN STANDARD CABLE IS AVAILABLE FOR THIS BIN CODE TO REPLACE THE PREVIOUSLY RECOMMENDED COMMERCIAL CABLE OR THE CABLES ARE NO LONGER MANUFACTURED. STANDARD TOOLS MAY NOT APPLY. FOLLOW CONTACT SUPPLIERS INSTRUCTIONS.
3/ NOT RECOMMENDED FOR USE.

TABLE 10 - DIELECTRIC WITHSTAND VOLTAGE (BETWEEN INNER AND OUTER CONTACT)

ALTITUDE (FEET)	TEST VOLTAGE (AC RMS)
SEA LEVEL	1000
50 000	250