

INCH-POUND

MS3474J  
w/AMENDMENT 1  
4 June 2009  
SUPERSEDING  
MS3474J  
1 March 2007

## DETAIL SPECIFICATION SHEET

CONNECTORS, RECEPTACLE, ELECTRICAL, SERIES 2, CRIMP TYPE,  
REAR MOUNTING JAM NUT, BAYONET COUPLING, CLASSES A, D, L, T, W AND Z

Reactivated after 1 March 2007, and may be used  
for new and existing designs and acquisitions.

This specification is approved for use by all Departments  
and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall  
consist of this specification sheet and MIL-DTL-26482.

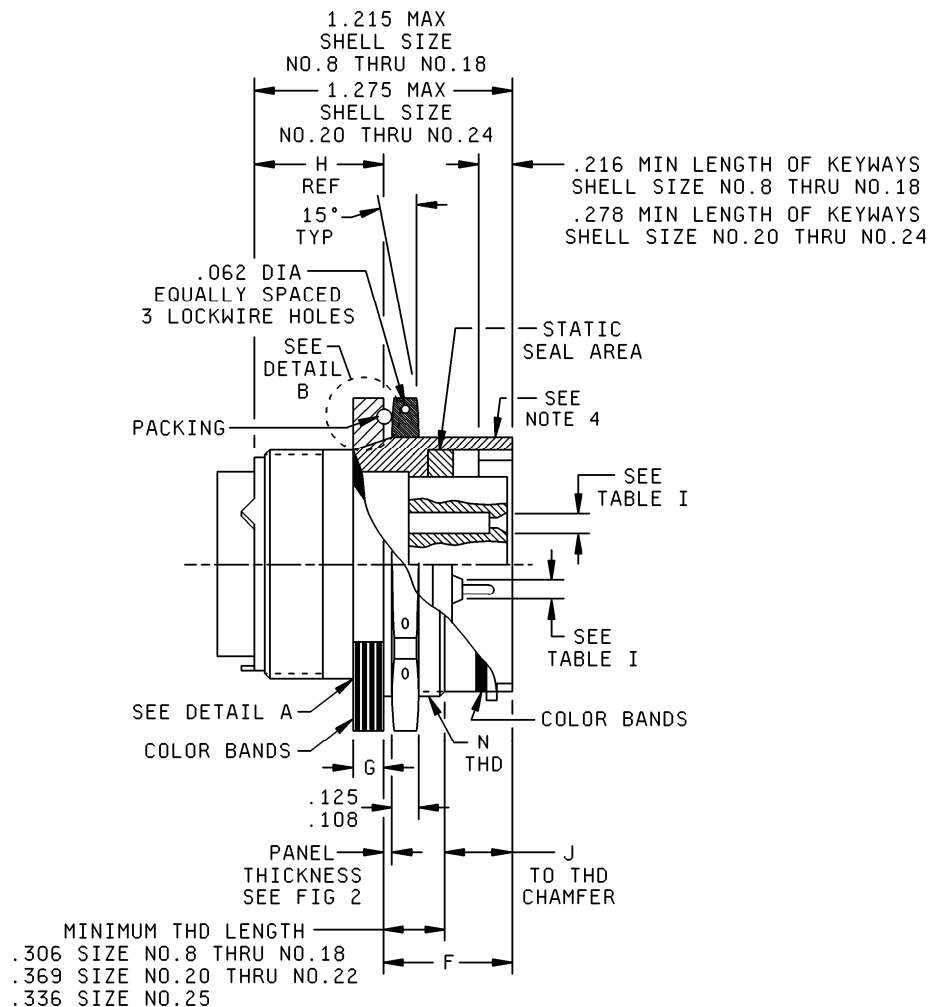


FIGURE 1. Receptacle, dimensions and configurations.

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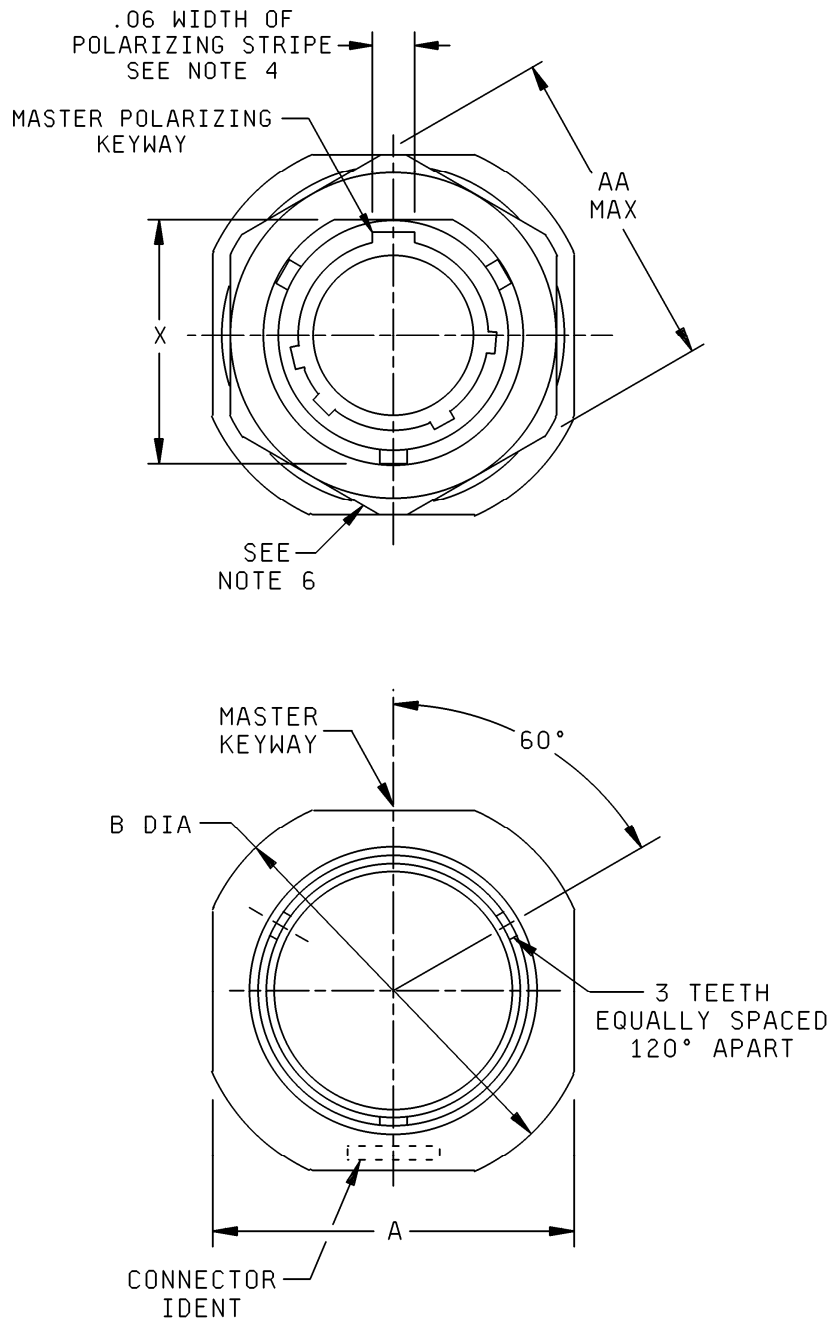
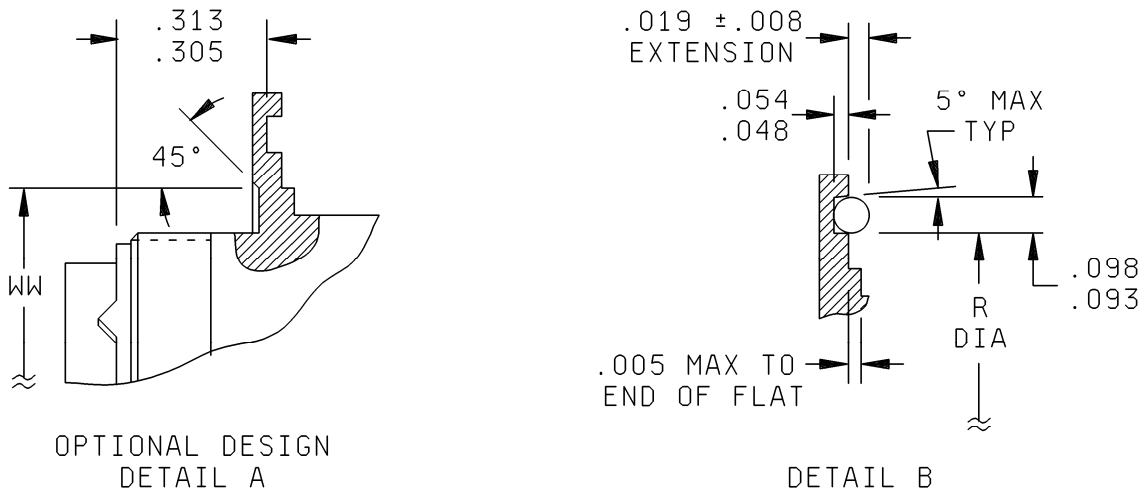


FIGURE 1. Receptacle, dimensions and configurations - Continued.

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Shell size	A	B	F	G	H	J
8	.954 (24.23) .923 (23.44)	1.078 (27.38) 1.047 (26.59)	.707 (17.95) .658 (17.61)	.113 (2.87) .086 (2.19)	.524 (13.31)	.378 (9.60) .346 (8.79)
10	1.078 (27.38) 1.047 (26.59)	1.203 (30.56) 1.172 (29.77)	.707 (17.95) .658 (17.61)	.113 (2.87) .086 (2.19)	.524 (13.31)	.378 (9.60) .346 (8.79)
12	1.266 (32.16) 1.235 (31.37)	1.391 (35.33) 1.360 (34.54)	.707 (17.95) .658 (17.61)	.113 (2.87) .086 (2.19)	.524 (13.31)	.378 (9.60) .346 (8.79)
14	1.391 (35.33) 1.360 (34.54)	1.516 (38.58) 1.485 (37.72)	.707 (17.95) .658 (17.61)	.113 (2.87) .086 (2.19)	.524 (13.31)	.378 (9.60) .346 (8.79)
16	1.516 (38.51) 1.485 (37.72)	1.641 (41.68) 1.610 (40.89)	.707 (17.95) .658 (17.61)	.113 (2.87) .086 (2.19)	.524 (13.31)	.378 (9.60) .346 (8.79)
18	1.641 (41.68) 1.610 (40.89)	1.766 (44.86) 1.735 (44.07)	.707 (17.95) .658 (17.61)	.113 (2.87) .086 (2.19)	.524 (13.31)	.378 (9.60) .346 (8.79)
20	1.828 (46.63) 1.797 (45.64)	1.954 (49.63) 1.923 (48.84)	.772 (19.61) .721 (18.31)	.148 (3.76) .096 (2.44)	.521 (13.23)	.378 (9.60) .346 (8.79)
22	1.954 (49.63) 1.923 (48.84)	2.078 (52.78) 2.047 (51.99)	.772 (19.61) .721 (18.31)	.148 (3.76) .096 (2.44)	.521 (13.23)	.378 (9.60) .346 (8.79)
24	2.078 (52.78) 2.047 (51.99)	2.203 (55.96) 2.172 (55.17)	.772 (19.61) .721 (18.31)	.148 (3.76) .096 (2.44)	.521 (13.23)	.405 (10.29) .379 (9.63)

FIGURE 1. Receptacle, dimensions and configurations - Continued.

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Shell size	N thread UNEF-2A	R	X	AA	WW	Pin contact max weight lbs (grams)	Socket contact max weight lbs (grams)
8	.5625-24	.609 (15.47)	.525 (13.34)	.767 (19.48)	.570 (14.48) .566 (14.38)	.0224 (10.17)	.0296 (13.44)
10	.6875-24	.734 (18.64)	.650 (16.51)	.892 (22.66)	.693 (17.60) .689 (17.50)	.0342 (15.53)	.0358 (16.25)
12	.875-20	.921 (23.39)	.813 (20.55)	1.079 (27.41)	.868 (22.05) .864 (21.95)	.0497 (22.56)	.0528 (23.97)
14	1.000-20	1.046 (26.57)	.937 (23.80)	1.205 (30.61)	.994 (25.25) .988 (25.10)	.0621 (28.19)	.0673 (30.55)
16	1.125-18	1.171 (29.74)	1.061 (26.95)	1.329 (33.76)	1.122 (28.50) 1.116 (28.35)	.0766 (34.77)	.0858 (38.95)
18	1.250-18	1.296 (32.92)	1.186 (30.12)	1.455 (36.96)	1.238 (31.45) 1.232 (31.29)	.0899 (40.81)	.1003 (45.53)
20	1.375-18	1.484 (37.69)	1.311 (33.30)	1.579 (40.11)	1.364 (34.65) 1.359 (34.52)	.1153 (52.34)	.1280 (58.11)
22	1.500-18	1.609 (40.87)	1.436 (36.47)	1.705 (43.81)	1.492 (37.90) 1.482 (37.64)	.1336 (60.65)	.1495 (67.87)
24	1.625-18	1.734 (44.04)	1.561 (39.65)	1.829 (46.46)	1.617 (41.07) 1.607 (40.82)	.1578 (71.64)	.1777 (80.67)

Inches	mm	Inches	mm	Inches	mm	Inches	mm
.005	.13	.060	1.50	.216	5.49	.336	8.53
.008	.20	.062	1.57	.278	7.06	.369	9.37
.019	.48	.093	2.36	.305	7.75	1.215	30.86
.048	1.22	.108	2.74	.306	7.77	1.275	32.39
.054	1.37	.125	3.18	.313	1.95		

## NOTES:

- Dimensions are in inches.
- Metric equivalents are given for information only.
- Unless otherwise specified, tolerances are  $\pm .005$  (0.13 mm) for 3 place decimals,  $\pm .01$  (0.3 mm) for 2 place decimals, and  $\pm 1^\circ$  for all angles.
- Polarizing stripe, color optional.
- Class E is cancelled and replaced by class L.
- MS3186 hex nut may be substituted, provided .125/.108 thickness requirement is satisfied.
- Color bands:  $0.070 \pm .031$  wide, color blue. Band location must be such that it is visible when mounted.

FIGURE 1. Receptacle, dimensions and configurations - Continued.

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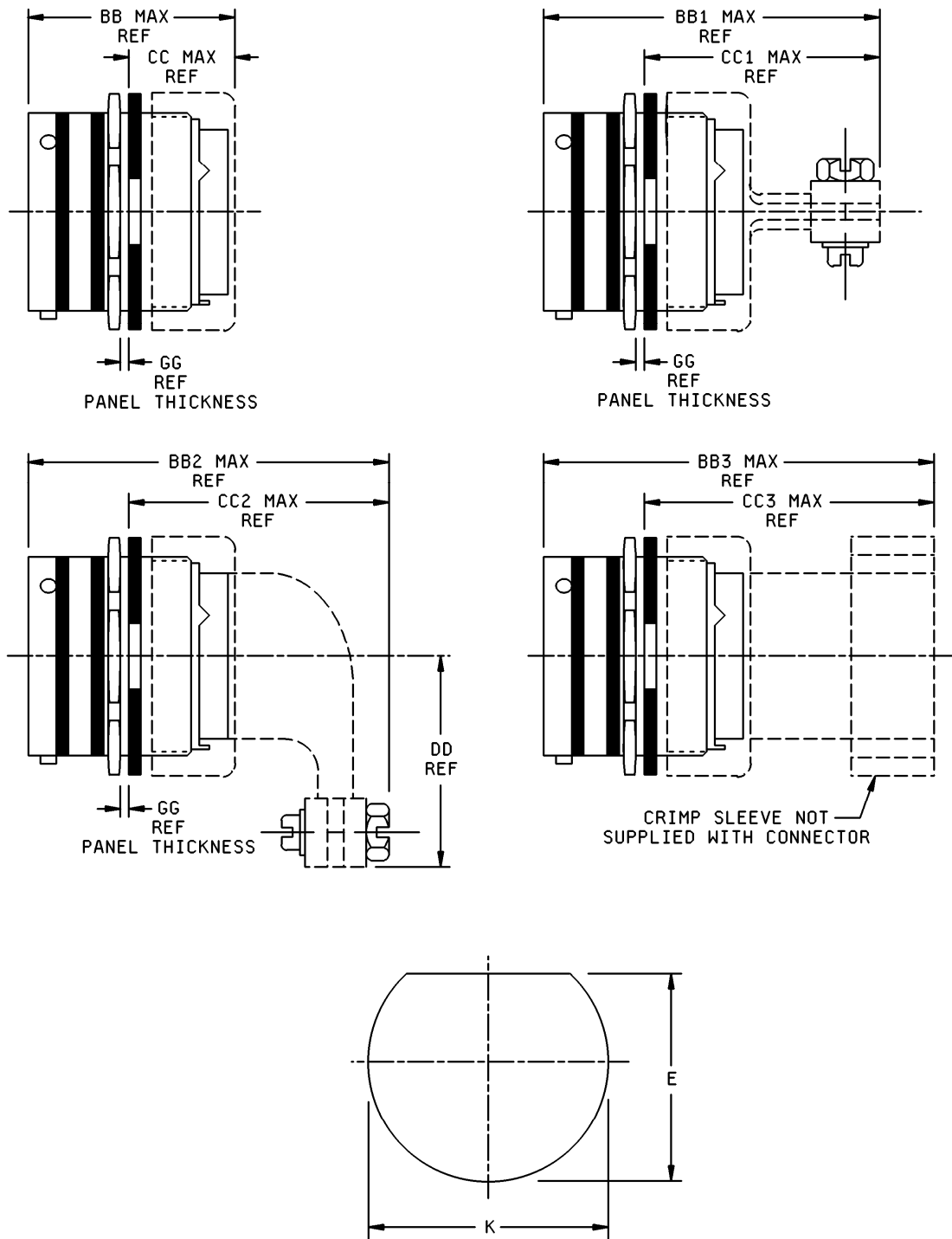


FIGURE 2. Receptacle, backshell.

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Shell size	E	K	BB	BB1	BB2	BB3	CC
8	.536 (13.61)	.572 (15.53)	1.492 (37.90)	1.842 (46.79)	2.115 (53.72)	2.339 (59.41)	.801 (20.35)
10	.661 (16.79)	.697 (17.70)	1.492 (37.90)	1.842 (46.79)	2.115 (53.72)	2.339 (59.41)	.801 (20.35)
12	.824 (20.93)	.895 (22.73)	1.492 (37.90)	1.842 (46.79)	2.250 (57.12)	2.339 (59.41)	.801 (20.35)
14	.948 (24.08)	1.010 (25.65)	1.492 (37.90)	2.077 (52.76)	2.340 (59.44)	2.339 (59.41)	.801 (20.35)
16	1.072 (27.23)	1.135 (28.83)	1.492 (37.90)	2.077 (52.76)	2.475 (62.87)	2.339 (59.41)	.801 (20.35)
18	1.197 (30.40)	1.260 (32.00)	1.492 (37.90)	2.077 (52.76)	2.574 (65.38)	2.339 (59.41)	.801 (20.35)
20	1.322 (33.58)	1.385 (35.18)	1.522 (39.42)	2.137 (54.38)	2.767 (70.28)	2.397 (60.88)	.798 (20.27)
22	1.447 (36.75)	1.510 (38.35)	1.522 (39.42)	2.137 (54.38)	2.890 (73.41)	2.397 (60.88)	.798 (20.27)
24	1.572 (39.93)	1.635 (41.53)	1.522 (39.42)	2.137 (54.38)	3.012 (76.50)	2.397 (60.88)	.798 (20.27)

FIGURE 2. Receptacle, backshell - Continued.

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Shell size	CC1	CC2	CC3	DD	GG
8	1.151 (29.24)	1.424 (36.17)	1.648 (41.86)	.830 (21.08)	.187 (4.75) .062 (1.57)
10	1.151 (29.24)	1.424 (36.17)	1.648 (41.86)	.880 (22.35)	.187 (4.75) .062 (1.57)
12	1.151 (29.24)	1.559 (39.60)	1.648 (41.86)	.950 (24.13)	.187 (4.75) .062 (1.57)
14	1.386 (35.20)	1.649 (41.88)	1.648 (41.86)	1.010 (25.65)	.187 (4.75) .062 (1.57)
16	1.386 (35.20)	1.784 (45.31)	1.648 (41.86)	1.070 (27.18)	.187 (4.75) .062 (1.57)
18	1.386 (35.20)	1.883 (47.83)	1.648 (41.86)	1.130 (28.70)	.187 (4.75) .062 (1.57)
20	1.383 (35.13)	2.013 (51.13)	1.645 (41.78)	1.190 (30.23)	.250 (6.35) .062 (1.57)
22	1.383 (35.13)	2.136 (54.25)	1.645 (41.78)	1.260 (32.00)	.250 (6.35) .062 (1.57)
24	1.383 (35.13)	2.258 (57.35)	1.645 (41.78)	1.320 (33.53)	.219 (5.56) .062 (1.57)

NOTES:

1. Dimensions are in inches. Metric equivalents are given for information only.
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3. Unless otherwise specified, tolerances are  $\pm .005$  (0.13 mm) for 3 place decimals,  $\pm .01$  (0.3 mm) for 2 place decimals, and  $\pm 1^\circ$  for all angles.

FIGURE 2. Receptacle, backshell - Continued.

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TABLE I. Insert arrangements requiring reduced diameters for raised seal barriers or lead-in chamfer on outer row of contact cavities.

Shell size	Insert arrangement	Contact cavities
8	-33 & -98	A, B, C
12	-10	C, G
14	-9	A, B, C, D, E, F, G, H, J
14	-12	A, B, C, D, E, F, G, H
14	-18	A, C, E, G, J, L
14	-19	B, D, F, H, K, M
16	-26	A, B, C, D, E, F, G, H, J, K, L, M, N, P, R
18	-32	A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, T
22	-41	A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, T, U, V, W, X, Y

REQUIREMENTS:

Dimensions and configuration: See figures 1 and 2 and table I.

Mating connector: This connector mates with MS3475 and MS3476.

For insert arrangement: See MIL-STD-1669.

For connector accessories see SAE-AS85049.

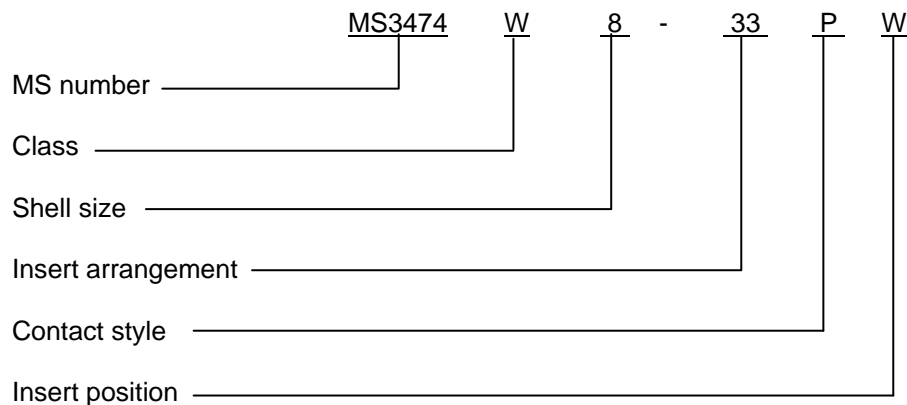
Connector assembly must be used with a backshell. Backshells must be acquired separately.

Connector identification marking shall be in accordance with MIL-DTL-26482.

Intermateability and rear accessory interchangeability dimensions shall be in accordance with MIL-DTL-26482.

This MS sheet supersedes MS3114, MIL-C-83723/5 and MIL-C-83723/6.

Part or Identifying Number (PIN) example:





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Amendment Notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Referenced documents. In addition to MIL-DTL-26482, this document references the following:

MS3186  
MS3475  
MS3476  
MIL-STD-1669  
SAE-AS85049

CONCLUDING MATERIAL

Custodians:

Army - CR  
Navy - AS  
Air Force - 85  
NASA - NA  
DLA - CC

Preparing activity:  
DLA - CC

(Project 5935-2008-135)

Review activities:

Army - AR, AV  
Navy - EC, MC, SH  
Air Force - 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://assist.daps.dla.mil>.