

INCH-POUND

MS27497P  
w/AMENDMENT 1  
15 November 2012  
SUPERSEDING  
MS27497P  
2 February 2012

## DETAIL SPECIFICATION SHEET

CONNECTORS, RECEPTACLE, ELECTRICAL, BACK PANEL, WALL  
MOUNTING FLANGE, CRIMP TYPE, BAYONET COUPLING, SERIES II

Reactivated after 24 May 2004 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-38999.

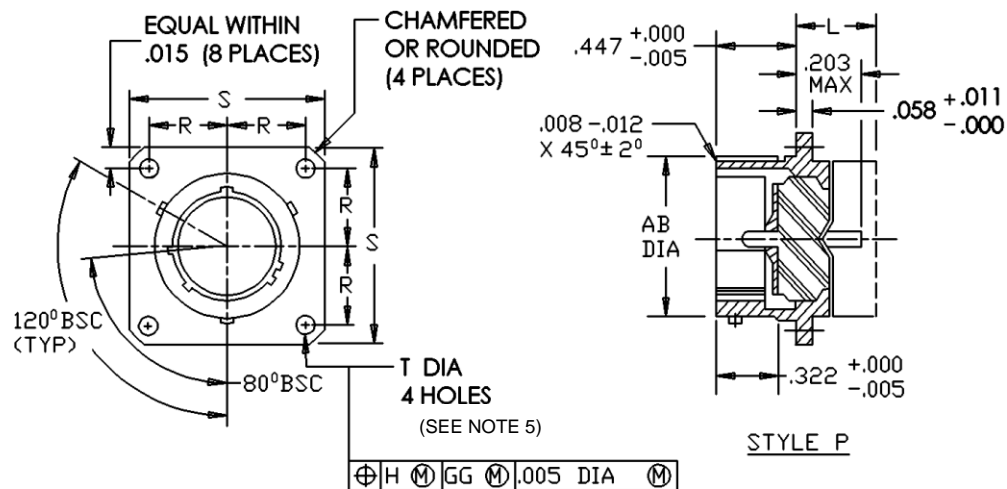


FIGURE 1. Receptacle, classes E, T, and P.

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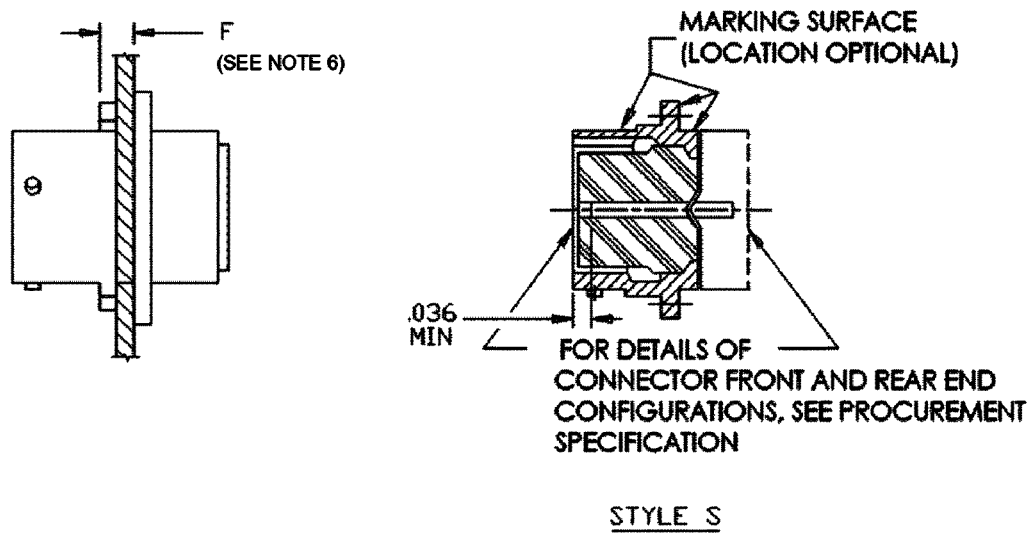


FIGURE 1. Receptacle, classes E, T, and P – Continued.

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Shell size	R BSC	S max	T +.010 -.005	AB max dia	F max
8	.297	.828	.120	.547	.146
10	.3595	.954		.672	
12	.406	1.047		.844	
14	.453	1.141		.969	
16	.4845	1.234		1.094	
18	.531	1.328		1.219	
20	.578	1.453		1.344	.168
22	.625	1.578	.147	1.469	
24	.6875	1.703		1.594	

Shell size	L (class E) max length	L (class P) max length	L (class T) max length
8	.562	.641	.391
10			
12			
14			
16			
18			
20			
22			
24		.703	.469

FIGURE 1. Receptacle, classes E, T, and P – Continued.

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Inches	mm	Inches	mm	Inches	mm	Inches	mm
.003	0.08	.406	10.31	.828	21.03	1.359	34.52
.005	0.13	.447	11.35	.844	21.44	1.375	34.92
.008	0.20	.453	11.51	.859	21.82	1.391	35.33
.011	0.28	.469	11.91	.875	22.22	1.453	36.91
.012	0.30	.4845	12.306	.954	24.23	1.469	37.31
.015	0.38	.500	12.70	.969	24.61	1.484	37.69
.020	0.51	.531	13.49	.984	24.99	1.500	38.10
.036	0.91	.547	13.89	1.047	26.59	1.516	38.51
.058	1.47	.562	14.27	1.078	27.38	1.578	40.08
.120	3.05	.578	14.68	1.094	27.79	1.594	40.49
.146	3.71	.609	15.47	1.125	28.58	1.609	40.87
.147	3.73	.625	15.88	1.141	28.98	1.641	41.68
.168	4.23	.641	16.28	1.219	30.96	1.703	43.26
.203	5.16	.672	17.07	1.234	31.34	1.766	44.86
.297	7.54	.6875	17.462	1.250	31.75	1.891	48.03
.322	8.18	.703	17.86	1.266	32.16	2.016	51.21
.3595	9.131	.734	18.64	1.328	33.73	2.204	55.98
.391	9.93	.750	19.05	1.344	34.14		

NOTES:

1. Dimensions are in inches
2. Metric equivalents are given for information only.
3. For main keyway and keyway positions, see MIL-DTL-38999.
4. Class E rear accessory thread of shell is external.
5. The gauge feature for GG shall be .010 inch (0.25 mm) smaller than the MMC size at basic location.
6. Maximum panel thickness including mounting hardware.
7. Applicable potting forms for class P: SAE-AS85049/58 and SAE-AS85049/75.

FIGURE 1. Receptacle, classes E, T, and P – Continued.

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REQUIREMENTS:

Dimensions and configuration: See figure 1.

Interface dimensions shall be in accordance with MIL-DTL-38999.

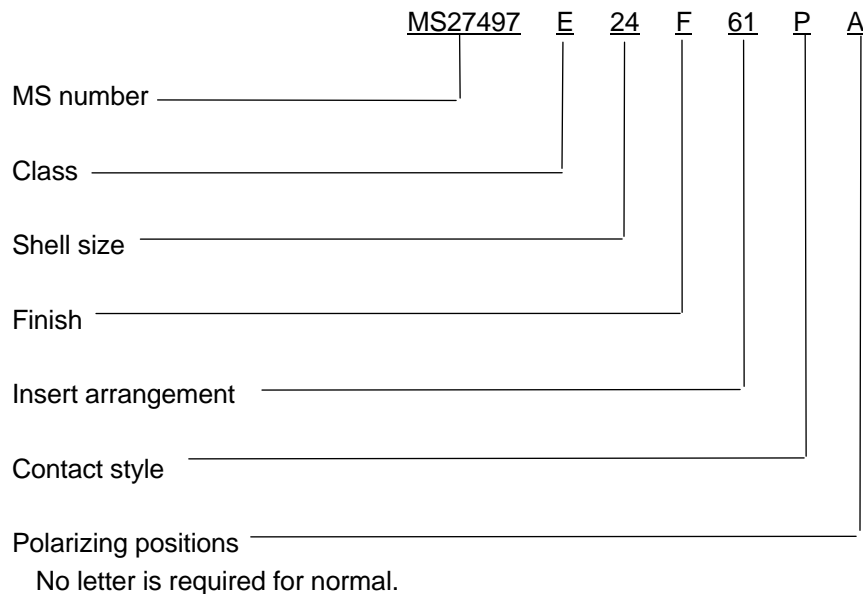
This receptacle mates with MS27473, MS27480, MS27484 and MS27500.

Procurement specification: MIL-DTL-38999.

Insert arrangements: See MIL-STD-1560.

For class E, compression nut in accordance with SAE-AS85049/27 shall be included.

Part or Identifying Number (PIN) example:



Restrictions.

Class E is inactive for new design.

Class P is inactive for new design for the Air Force.

Finish F is not for Navy use. Finish F is inactive for new design for the Air Force.

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-38999, this document references the following:

MIL-STD-1560  
MS27473  
MS27480  
MS27484  
MS27500  
SAE-AS85049/27  
SAE-AS85049/58  
SAE-AS85049/75

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CONCLUDING MATERIAL

Custodians:

Army – CR  
Navy – AS  
Air Force – 85  
DLA – CC

Preparing activity:

DLA – CC

(Project 5935–2012-198)

Review activities:

Army – AR, MI  
Navy – EC, MC, OS  
Air Force – 19, 99  
DLA – IS

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