



**DEFENSE LOGISTICS AGENCY**  
DEFENSE SUPPLY CENTER, COLUMBUS  
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COLUMBUS, OH 43218-3990

IN REPLY  
REFER TO

DSCC-VAI

June 17, 2004

MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: Initial Draft of Military Standards MS24285 through MS24288 and MS24695 through MS24700, Connector, Rack and Panel, Miniature, project numbers 5935-4695 through 4703.

The initial drafts for these subject documents, dated 14 June 2004, are now available for viewing and downloading from the DSCC-VA Web site:

<http://www.dscccols.com/Programs/MilSpec>

or

<http://www.dscc.dla.mil/Programs/MilSpec/DocSearch.asp>

Major changes to these documents include: formatting documents into slash sheet format, drawings on documents have been redrawn to be more legible, and cancelled military references have been changed to the industry equivalents.

Concurrence or comments are required at this Center within 45 days from the date of this letter. Late comments will be held for the next coordination of the document. Comments from military departments must be identified as either "Essential" or "Suggested". Essential comments must be justified with supporting data. Military review activities should forward comments to their custodians of this office, as applicable, in sufficient time to allow for consolidating the department reply.

The point of contact for this document is Mr. William Carpenter, Defense Supply Center Columbus, DSCC-VAI, Post Office Box 3990, Columbus, OH 43218-3990. Mr. Carpenter can also be reached at 614-692-0573/850-0573, or by facsimile 614-692-6940/850-6940, or by e-mail to: William.F.Carpenter@dla.mil.

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NOTE: This initial draft, dated 14 June 2004 prepared by DLA-CC, has not been approved and is subject to modification. DO NOT USE PRIOR TO APPROVAL. (PROJECT NUMBER 5935-4696)

INCH-POUND

MS24286E  
DRAFT  
SUPERSEDING  
MS24286D  
5 January 1968

DETAIL SPECIFICATION SHEET

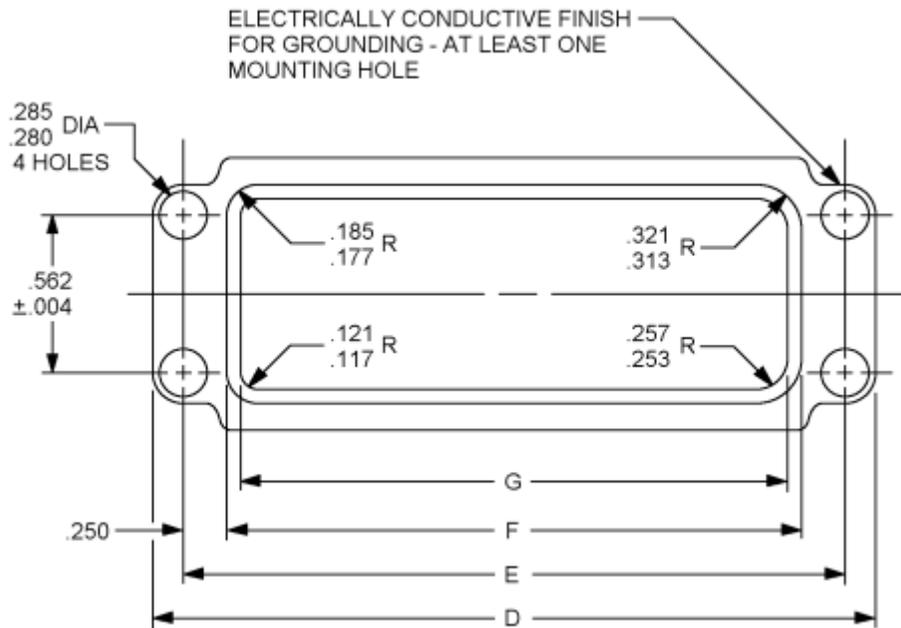
CONNECTORS, ELECTRICAL, MINIATURE

Inactive for new design after 8 June 1999.

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-26518.

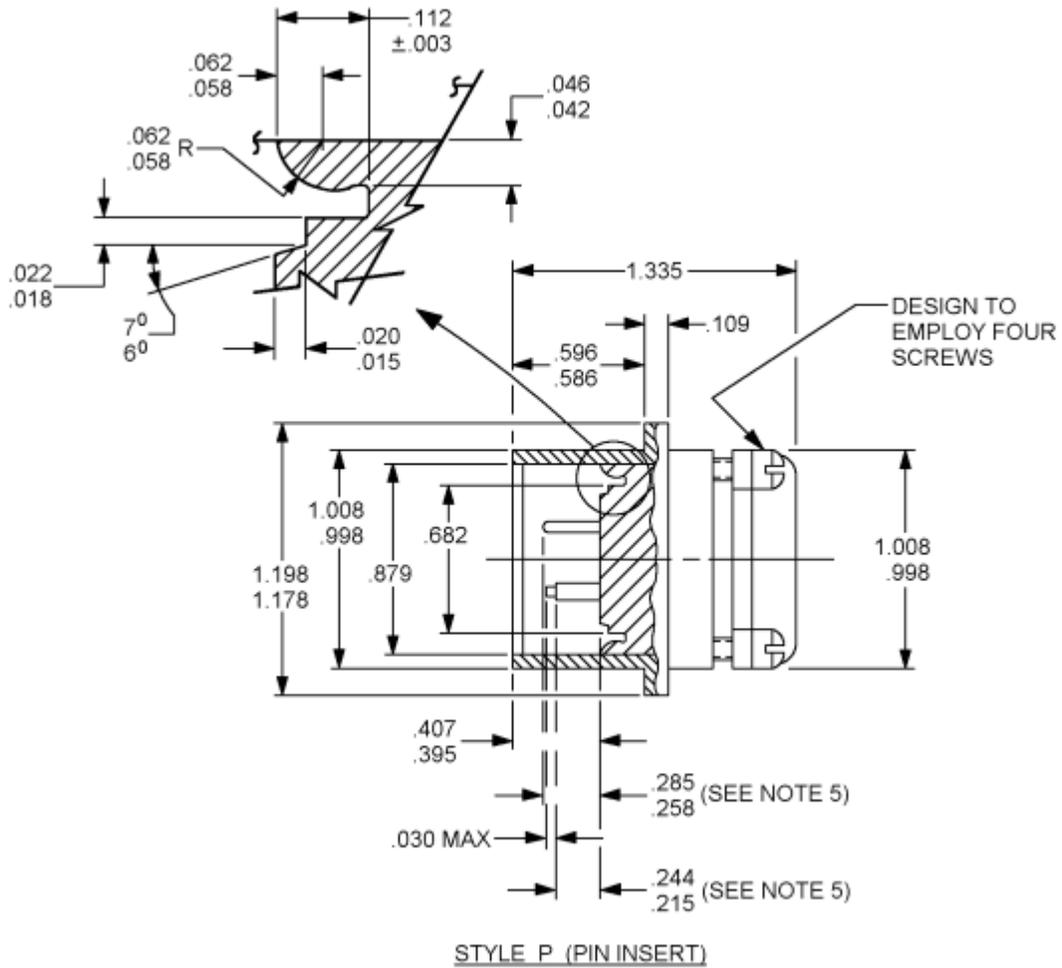
The Qualified Products List (QPL) associated with this inactive for new design specification will be maintained until acquisition of the product is no longer required, where upon the specification and QPL will be canceled.



Style P (pin insert)

FIGURE 1. Connector dimensions and configurations.

MS24286E



Environment Resistant (R) Receptacles

Shell size	D ±.005	E ±.004	F ±.005	G
A	4.296	3.875	3.375	3.215
B	2.866	2.445	1.948	1.821
C	2.421	2.000	1.516	1.292

FIGURE 1. Connector dimensions and configurations - Continued.

MS24286E

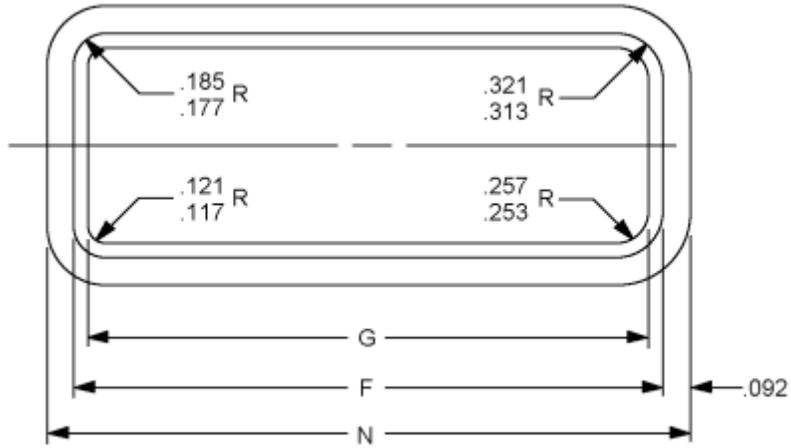
Inches	mm	Inches	mm	Inches	mm
.003	0.08	.185	4.70	.998	25.35
.004	0.10	.215	5.46	1.008	25.60
.015	0.38	.244	6.20	1.178	29.92
.018	0.46	.250	6.35	1.198	30.43
.020	0.51	.253	6.43	1.292	32.82
.022	0.56	.257	6.53	1.335	33.91
.030	0.76	.258	6.55	1.516	38.51
.042	1.07	.285	7.24	1.821	46.25
.046	1.17	.313	7.5	1.948	49.48
.058	1.47	.321	8.15	2.000	50.80
.062	1.57	.395	10.03	2.421	61.49
.109	2.77	.407	10.34	2.445	62.10
.112	2.84	.567	14.40	2.866	72.80
.119	3.02	.586	14.88	3.215	81.66
.121	3.07	.596	15.14	3.375	85.73
.177	4.50	.682	17.32	3.875	98.43
		.879	22.33	4.296	109.11

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified tolerances are  $\pm 0.003$  inch (0.08 mm).
4. For insert arrangement see MS24288.
5. Dimension on socket contact location applies when contacts are placed in inserts for inspection or application.

FIGURE 1. Connector dimensions and configurations - Continued.

MS24286E



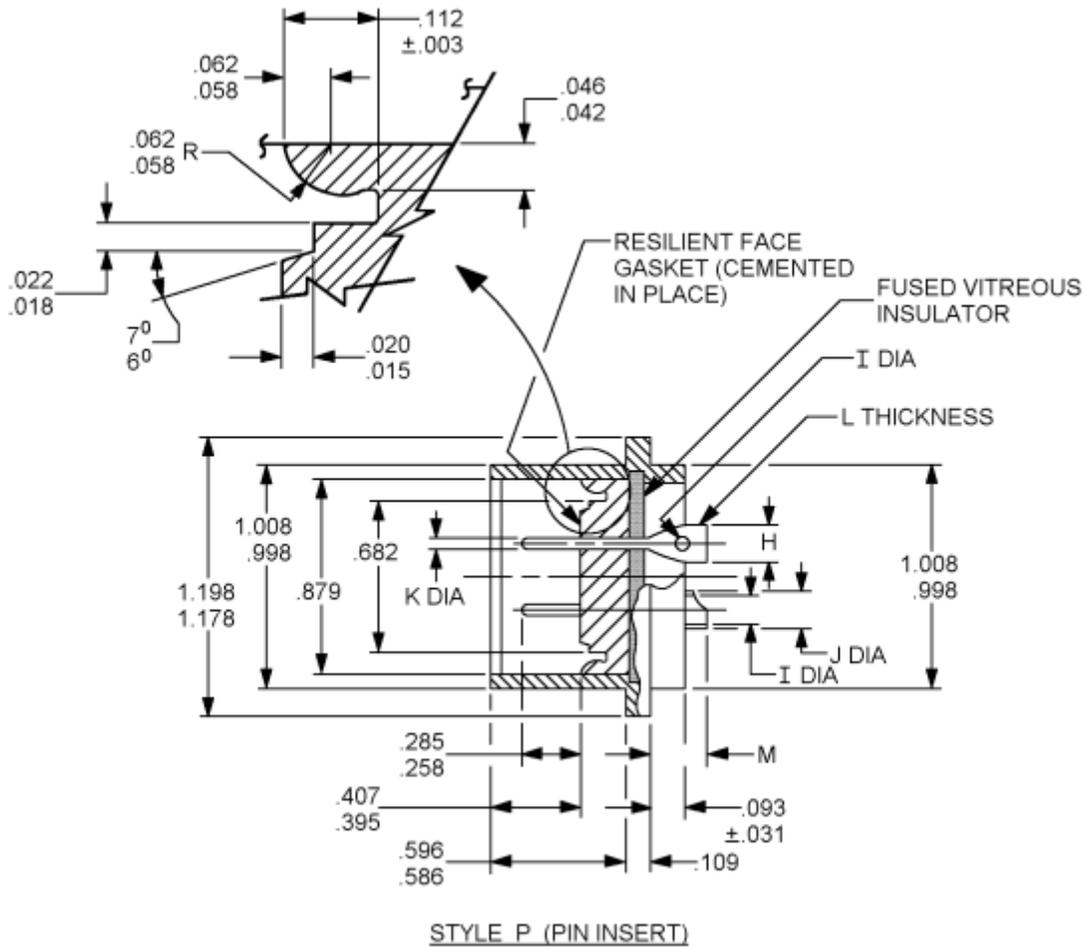
Inches	mm	Inches	mm
.003	0.08	.185	4.70
.015	0.38	.253	6.43
.018	0.46	.257	6.53
.020	0.51	.258	6.55
.022	0.56	.285	7.24
.031	0.79	.313	7.95
.042	1.07	.321	8.15
.046	1.17	.395	10.03
.058	1.47	.407	10.34
.062	1.57	.586	14.88
.092	2.34	.596	15.14
.093	2.36	.682	17.32
.109	2.77	.879	22.33
.117	2.97	.998	25.35
.121	3.07	1.008	25.60
.177	4.50	1.178	29.92
		1.198	30.43

Style P (pin insert)

Hermetic (H) receptacles

FIGURE 2. Connector dimensions and configurations

MS24286E



Shell size	N ±.005	F ±.005	G
A	3.560	3.375	3.251
B	2.130	1.945	1.821
C	1.685	1.516	1.392

Size of contact	Type of contacts	H	I Dia		J Dia		K Dia		L	M max
			Max	Min	Max	Min	Max	Min		
12	Solder cup		.102	.098	.153	.147	.095	.093		.300
12	Eyelet	.200	.102	.098			.095	.093	.035	.300
16	Solder cup		.68	.066	.105	.101	.063	.061		.300
16	Eyelet	.125	.68	.066			.063	.061	.025	.300
20	Solder cup		.050	.048	.078	.076	.041	.039		.230
20	Eyelet	.080	.050	.048			.041	.039	.015	.230

FIGURE 2. Connector dimensions and configurations – Continued.

MS24286E

Inches	mm	Inches	mm
.005	0.13	.101	2.57
.015	0.38	.102	2.59
.025	0.64	.105	2.67
.035	0.89	.147	3.73
.039	0.99	.153	3.89
.041	1.04	.230	5.84
.048	1.22	.300	7.62
.050	1.27	.68	17.27
.061	1.55	1.392	35.36
.063	1.60	1.516	38.51
.066	1.68	1.685	42.80
.076	1.93	1.821	46.25
.078	1.98	1.945	49.40
.093	2.36	2.130	54.10
.095	2.41	3.251	82.58
.098	2.49	3.375	85.73
		3.560	90.42

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified tolerances are  $\pm 0.003$  inch (0.08 mm).
4. For insert arrangement see MS24288.
5. Dimension on socket contact location applies when contacts are placed in inserts for inspection or application.

FIGURE 2. Connector dimensions and configurations – Continued.

MS24286E

REQUIREMENTS:

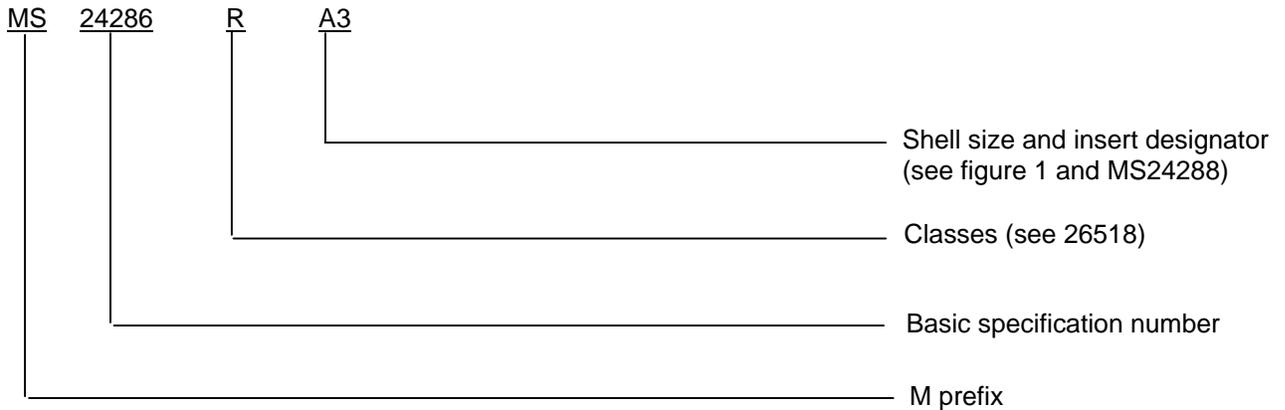
Dimensions and configuration see figure 1.

Materials shall be in accordance with MIL-DTL-26518.

For mating and mounting details see MS24287 and MS24288

Classes

Part or Identifying Number (PIN):



Referenced documents: In addition to MIL-DTL-26518 this document references the following:

- MS24287
- MS24288

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

CONCLUDING MATERIAL

Custodians:  
Air Force - 11  
DLA - CC

Preparing activity:  
DLA - CC

(Project 5935-4696-000)

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 [www.dodssp.daps.mil](http://www.dodssp.daps.mil).

<b>PROJECT NUMBER</b> 5935-4696	<b>COMPILATION OF COMMENTS</b>		(DOD use only) <b>COMMENT NUMBER</b>
<b>DOCUMENT NUMBER</b> MS24286E	<b>COMMENTOR (NAME OR CODE)</b>		<input type="checkbox"/> <b>MFR</b> <input type="checkbox"/> <b>USER</b> <input type="checkbox"/> <b>IND ASSOC</b>
<b>DOD USE ONLY</b>	<b>DEPT</b>	<input type="checkbox"/> <b>ARMY</b> <input type="checkbox"/> <b>NAVY</b> <input type="checkbox"/> <b>AF</b> <input type="checkbox"/> <b>DLA</b> <input type="checkbox"/> <b>NSA</b> <input type="checkbox"/> <b>CNDN</b> <input type="checkbox"/> <b>NASA</b>	<input type="checkbox"/> <b>ESSENTIAL</b> <input type="checkbox"/> <b>SUGGESTED</b>
<b>RECOMMENDED DISPOSITION OF COMMENTS</b>	<input type="checkbox"/> <b>ACCEPTANCE</b> <input type="checkbox"/> <b>NON-ACCEPTANCE-SEE REASON</b> <input type="checkbox"/> <b>WITHDRAW</b> <input type="checkbox"/> <b>MODIFY</b> <input type="checkbox"/> <b>DISCUSS</b>		
<b>FINAL DISPOSITION OF COMMENTS</b>	<input type="checkbox"/> <b>ACCEPTED</b> <input type="checkbox"/> <b>NON-ACCEPTED</b> <input type="checkbox"/> <b>WITHDRAWN</b> <input type="checkbox"/> <b>MODIFIED</b>		

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<b>PROJECT NUMBER</b> 5935-4696	<b>COMPILATION OF COMMENTS</b>		(DOD use only) <b>COMMENT NUMBER</b>
<b>DOCUMENT NUMBER</b> MS24286E	<b>COMMENTOR (NAME OR CODE)</b> _____		<input type="checkbox"/> <b>MFR</b> <input type="checkbox"/> <b>USER</b> <input type="checkbox"/> <b>IND ASSOC</b>
<b>DOD USE ONLY</b>	<b>DEPT</b>	<input type="checkbox"/> <b>ARMY</b> <input type="checkbox"/> <b>NAVY</b> <input type="checkbox"/> <b>AF</b> <input type="checkbox"/> <b>DLA</b> <input type="checkbox"/> <b>NSA</b> <input type="checkbox"/> <b>CNDN</b> <input type="checkbox"/> <b>NASA</b>	<input type="checkbox"/> <b>ESSENTIAL</b> <input type="checkbox"/> <b>SUGGESTED</b>
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