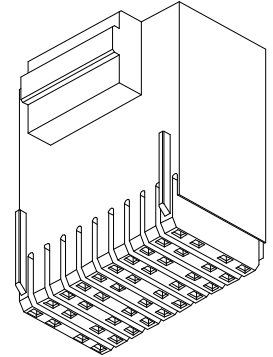




***VHDM-HSD™ Backplane Signal Insertion Module
Application Tooling Specification
Press-In Tool
Order No. 62202-0201**



FEATURES

- Polarized tool prevents product damage.
- Tool provides uniform distribution of press force across entire pin array.
- May be used as a stand-alone tool or mounted in an optional tooling holder with other Molex press-in tools.

SCOPE

Products: *VHDM-HSD™ Standard Shield Signal Module Assembly, (40 Circuits), 74695, 74696, 74697, 74701, and 74702 Series 5 Rows by 10 Columns Assemblies. See Product List below for specific part numbers.

Product List

The following is a partial list of the product order numbers and their specifications this tool is designed to run. Updates to this list are available on www.molex.com.

74695 Series Number							
Guide Style	Columns	Assembly Order Number					
Open End	5	74695-1001	74695-1002	74695-1003	74695-1004	74695-1006	74695-1007
		74695-1008	74695-1009				
		74695-1101	74695-1102	74695-1103	74695-1104	74695-1106	74695-1107
		74695-1108	74695-1109				
		74695-9001	74695-9002	74695-9003	74695-9004	74695-9006	74695-9007
		74695-9008	74695-9009				

74696 Series Number							
Guide Style	Columns	Assembly Order Number					
Signal End	5	74696-1001	74696-1002	74696-1003	74696-1004	74696-1006	74696-1007
		74696-1008	74696-1009	74696-1011	74696-1012	74696-1013	74696-1014
		74696-1016	74696-1017	74696-1018	74696-1019	74696-1021	74696-1022
		74696-1023	74696-1024	74696-1026	74696-1027	74696-1028	74696-1029
		74696-1031	74696-1032	74696-1033	74696-1034	74696-1036	74696-1037
		74696-1038	74696-1039	74696-1041	74696-1042	74696-1043	74696-1044
		74696-1046	74696-1047	74696-1048	74696-1049	74696-1051	74696-1052
		74696-1053	74696-1054	74696-1056	74696-1057	74696-1058	74696-1059
		74696-1061	74696-1062	74696-1063	74696-1064	74696-1066	74696-1067
		74696-1068	74696-1069	74696-1071	74696-1072	74696-1073	74696-1074
		74696-1076	74696-1077	74696-1078	74696-1079	74696-1081	74696-1082
		74696-1083	74696-1084	74696-1086	74696-1087	74696-1088	74696-1089
		74696-1101	74696-1102	74696-1103	74696-1104	74696-1106	74696-1107
		74696-1108	74696-1109	74696-1111	74696-1112	74696-1113	74696-1114
		74696-1116	74696-1117	74696-1118	74696-1119	74696-1121	74696-1122
		74696-1123	74696-1124	74696-1126	74696-1127	74696-1128	74696-1129
		74696-1131	74696-1132	74696-1133	74696-1134	74696-1136	74696-1137
		74696-1138	74696-1139	74696-1141	74696-1142	74696-1143	74696-1144
		74696-1146	74696-1147	74696-1148	74696-1149	74696-1151	74696-1152

74696 Series Number							
Guide Style	Columns	Assembly Order Number					
Signal End	5	74696-1153	74696-1154	74696-1156	74696-1157	74696-1158	74696-1159
		74696-1161	74696-1162	74696-1163	74696-1164	74696-1166	74696-1167
		74696-1168	74696-1169	74696-1171	74696-1172	74696-1173	74696-1174
		74696-1176	74696-1177	74696-1178	74696-1179	74696-1181	74696-1182
		74696-1183	74696-1184	74696-1186	74696-1187	74696-1188	74696-1189
		74696-9001	74696-9002	74696-9003	74696-9004	74696-9006	74696-9007
		74696-9008	74696-9009	74696-9011	74696-9012	74696-9013	74696-9014
		74696-9016	74696-9017	74696-9018	74696-9019	74696-9021	74696-9022
		74696-9023	74696-9024	74696-9026	74696-9027	74696-9028	74696-9029
		74696-9031	74696-9032	74696-9033	74696-9034	74696-9036	74696-9037
		74696-9038	74696-9039	74696-9041	74696-9042	74696-9043	74696-9044
		74696-9046	74696-9047	74696-9048	74696-9049	74696-9051	74696-9052
		74696-9053	74696-9054	74696-9056	74696-9057	74696-9058	74696-9059
		74696-9061	74696-9062	74696-9063	74696-9064	74696-9066	74696-9067
		74696-9068	74696-9069	74696-9071	74696-9072	74696-9073	74696-9074
		74696-9076	74696-9077	74696-9078	74696-9079	74696-9081	74696-9082
		74696-9083	74696-9084	74696-9086	74696-9087	74696-9088	74696-9089

74697 Series Number							
Guide Style	Columns	Assembly Order Number					
Shield End	5	74697-1001	74697-1002	74697-1003	74697-1004	74697-1006	74697-1007
		74697-1008	74697-1009	74697-1011	74697-1012	74697-1013	74697-1014
		74697-1016	74697-1017	74697-1018	74697-1019	74697-1021	74697-1022
		74697-1023	74697-1024	74697-1026	74697-1027	74697-1028	74697-1029
		74697-1031	74697-1032	74697-1033	74697-1034	74697-1036	74697-1037
		74697-1038	74697-1039	74697-1041	74697-1042	74697-1043	74697-1044
		74697-1046	74697-1047	74697-1048	74697-1049	74697-1051	74697-1052
		74697-1053	74697-1054	74697-1056	74697-1057	74697-1058	74697-1059
		74697-1061	74697-1062	74697-1063	74697-1064	74697-1066	74697-1067
		74697-1068	74697-1069	74697-1071	74697-1072	74697-1073	74697-1074
		74697-1076	74697-1077	74697-1078	74697-1079	74697-1081	74697-1082
		74697-1083	74697-1084	74697-1086	74697-1087	74697-1088	74697-1089
		74697-1101	74697-1102	74697-1103	74697-1104	74697-1106	74697-1107
		74697-1108	74697-1109	74697-1111	74697-1112	74697-1113	74697-1114
		74697-1116	74697-1117	74697-1118	74697-1119	74697-1121	74697-1122
		74697-1123	74697-1124	74697-1126	74697-1127	74697-1128	74697-1129
		74697-1131	74697-1132	74697-1133	74697-1134	74697-1136	74697-1137
		74697-1138	74697-1139	74697-1141	74697-1142	74697-1143	74697-1144
74697-1146	74697-1147	74697-1148	74697-1149	74697-1151	74697-1152		
74697-1153	74697-1154	74697-1156	74697-1157	74697-1158	74697-1159		
74697-1161	74697-1162	74697-1163	74697-1164	74697-1166	74697-1167		
74697-1168	74697-1169	74697-1171	74697-1172	74697-1173	74697-1174		
74697-1176	74697-1177	74697-1178	74697-1179	74697-1181	74697-1182		
74697-1183	74697-1184	74697-1186	74697-1187	74697-1188	74697-1189		
74697-9001	74697-9002	74697-9003	74697-9004	74697-9006	74697-9007		
74697-9008	74697-9009	74697-9011	74697-9012	74697-9013	74697-9014		
74697-9016	74697-9017	74697-9018	74697-9019	74697-9021	74697-9022		
74697-9023	74697-9024	74697-9026	74697-9027	74697-9028	74697-9029		
74697-9031	74697-9032	74697-9033	74697-9034	74697-9036	74697-9037		
74697-9038	74697-9039	74697-9041	74697-9042	74697-9043	74697-9044		
74697-9046	74697-9047	74697-9048	74697-9049	74697-9051	74697-9052		
74697-9053	74697-9054	74697-9056	74697-9057	74697-9058	74697-9059		
74697-9061	74697-9062	74697-9063	74697-9064	74697-9066	74697-9067		

74697 Series Number							
Guide Style	Columns	Assembly Order Number					
Shield End	5	74697-9068	74697-9069	74697-9071	74697-9072	74697-9073	74697-9074
		74697-9076	74697-9077	74697-9078	74697-9079	74697-9081	74697-9082
		74697-9083	74697-9084	74697-9086	74697-9087	74697-9088	74697-9089

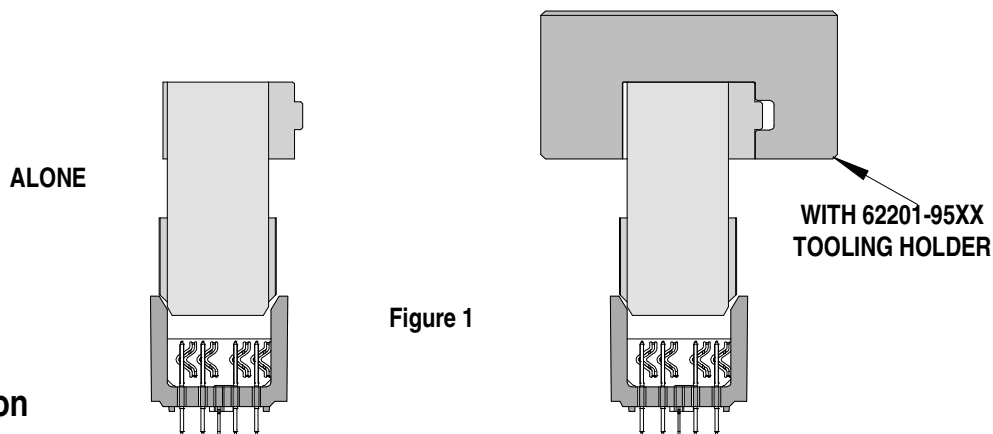
74701 Series Number						
Guide Style	Columns	Assembly Order Number				
Custom	5	74701-0001	74701-0002	74701-0003	74701-0004	74701-0005

74702 Series Number							
Guide Style	Columns	Assembly Order Number					
Custom	5	74702-0001	74702-0005	74702-0006	74702-0011	74702-0012	74702-0013
		74702-0014	74702-0015	74702-0016	74702-0017	74702-0018	74702-0019
		74702-0023	74702-0024	74702-0026	74702-0029	74702-9988	74702-9989
		74702-9993	74702-9994				

*VHDM® is a registered trademark of Teradyne, Inc.

Tool Setup

Depending on the number of connectors to be installed and/or the press used, this tool can be used alone or with a group of press-in tools, mounted in a 62201-95XX tooling holder (ordered separately). See Figure 1.



Tool Installation

The 62201-95XX tooling holder is available in a variety of lengths to accommodate multiple press-in tools.

Tooling Holder Part Number	Rail Overall Length
62201-9501	24mm (0.94 in)
62201-9502	72mm (2.83 in)
62201-9503	156mm (6.14 in)
62201-9504	216mm (8.50 in)
62201-9509	254mm (10.0 in)
62201-9511	305mm (12.0 in)

Reference: The 62202-0201 Press-In Tool is 19.9mm (.785 in.) long by 25.0mm (.984 in.) high.

Printed Circuit Board (PCB) Support

The VHDM-HSD™ connector requires a large amount of force per pin to press into the PCB. To prevent excessive PCB flexure and/or damage to the PCB, a support plate is strongly recommended directly beneath the connector hole pattern.

Due to the custom nature of every application, Molex does not offer any PCB support plate. The customer must furnish their own support plate.

When creating the PCB support plate, remember to allow clearance for the connector pins as they pass through the PCB thickness.

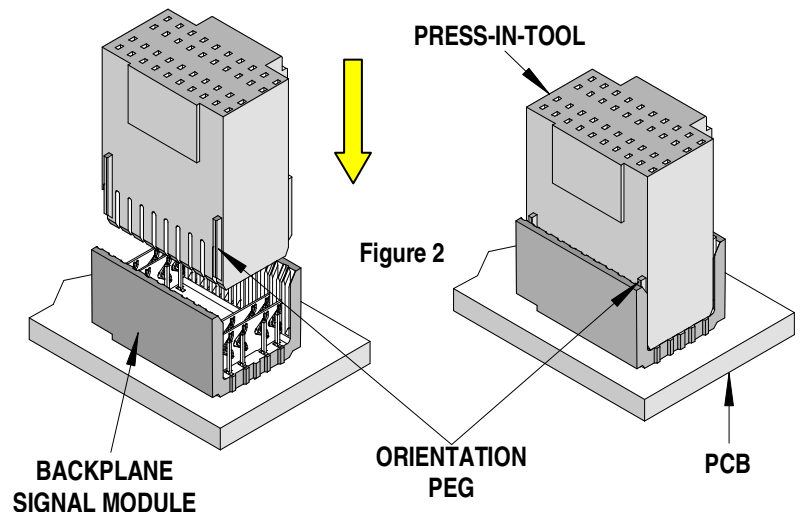
Press Equipment Recommendations

Many types of presses can be used to install VHDM-HSD™ connectors, but to assure consistent connector installation Molex recommends the following press criteria:

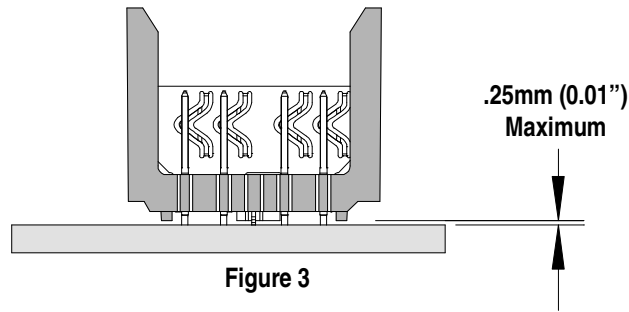
1. The capability to detect force variations as low as 4.5kg (10 lb) during the press-in cycle; excessive force measurements should stop the press-in cycle.
2. The rate of pressing can be regulated as low as 0.13mm (0.005 in) per second.
3. Press stroke control to within 0.25mm (0.010 in).
4. Total press stroke must be at least 19mm (0.75 in).
5. For statistical purposes, automatic collection of force and distance data.

Tool Operation

1. Carefully insert, by hand, the backplane signal module(s) into the PCB hole pattern. Make sure the connector(s) are oriented properly.
2. Insert the press-in-tool into the backplane signal module assembly with the orientation peg on the tool entering the groove in the connector housing. Make sure all the pins and shields fit into the proper slots. See Figure 2.



- Using the application tool and an appropriate press, seat the header assembly until there is less than 0.25mm (0.01 in) clearance between the bottom of the plastic housing and the surface of the PCB. See Figure 3.



CAUTION: To prevent injury, never operate any press without the guards in place. Refer to the press manufacturer's instruction manual.

CAUTION: Molex application tooling specifications are valid only when used with Molex connectors and tooling.

Contact Information

For more information on Molex application tooling please contact Molex at 1-800-786-6539.

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