

SMPM Smooth Bore Interface Per MIL-STD-348



Eye-of-the-ine Contacts

Figure 1: SMPM Vertical Plug Connector with EON Contacts.

PART NUMBER	DESCRIPTION
1996318-1	SMPM VERTICAL PRINTED CIRCUIT BOARD (PCB) PLUG WITH EON CONTACTS.

Table 1

1. INTRODUCTION

The SMPM PCB Plug with Eye-of-the-Needle (EON) Contacts listed in Table 1 is designed to be mounted onto a printed circuit board to provide RF signal to the board from a mating SMPM Jack Connector.

Read these instructions thoroughly before installing these assemblies.

NOTE



Dimensions in this instruction sheet are in millimeters [with inches in brackets]. Figures are for reference only and may not be drawn to scale.

2. DESCRIPTION

Each SMPM Vertical Plug Assembly has four EON contacts that are attached to the housing and one EON contact attached to the center contact of the assembly.

The SMPM interface is in accordance with MIL-STD-348, figure 328-3 (Interface, series SMPM, pin contact, smooth bore interface).

Extraction of the SMPM Plug from the PCB is accomplished by sliding or clamping a tool (see figure 2) in to the flats on the side of the housing and pulling up perpendicular and away from the PCB surface.



Figure 2: Installation and Removal of SMPM Contacts.

3. TOOLING

Customer supplied tooling for seating the SMPM Plug assemblies shall be designed using the dimensions provided in figures 3, 4 and 5.

The press or application tool must be capable of supplying 400 N [90 lbf] of downward force per SMPM assembly that is placed on the PCB simultaneously.

An extraction force of 120 N [27 lbf] may be required to remove the SMPM connector from the PCB.

CAUTION



The components of the SMPM Plug Assembly are not repairable. Discard or replace any defective or damaged assemblies. DO NOT re-use the assembly after it has been removed from the PCB.

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Figure 3: Support Block and Connector Installation.

4. INSTALLATION

- Partially insert the SMPM connector into the appropriate holes in the PCB.
- Place the PCB on the support block so that the grooves are in line with the PCB holes.
 Failure to align the support block grooves with the PCB holes may result in damage to the SMPM Connector and/or the PCB.
- Center the insertion tool over the interface of the SMPM Plug Connector. Be careful to align the insertion tool concentrically with the SMPM coaxial interface.
- Apply force to the tool with the press or other application tool until the base of the Connector is flush with the surface of the PCB.
- Inspect the mounted connector in accordance with figure 3. The housing should be flush to .1 [.004] above the surface of the PCB.

5. Removal

- Insert the extraction tool into the grooves or flats on the housing of the SMPM Plug Connector.
- Pull the connector out of the PCB using a force that is perpendicular to the surface of the board. See Figure 2.
- Inspect the PCB Through-holes for damage. If another SMPM connector will be used in the same location, it may be necessary to place the EON contacts in a different orientation so that the EON bulges do not fall into the same grooves.

6. Revision Summary

B. Corrected extraction tool DIM.





Figure 5: Extraction Tool