Coupling Bushing Kit



| KIT |  | MOUNTING APPLICATION | MATING PACKAGE (Active Device) | HARDWARE INCLUDED WITH KIT |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | PART NUMBER |  |  | $\begin{aligned} & \text { DUST } \\ & \text { CAP } \end{aligned}$ | O-RING | JAM NUT | LOCK WASHER | NO. 2-56 SCREW | ACTIVE DEVICE RING |
| Coupling | 501049-1 | Panel | - | 2 | - | 1 | 1 | - | - |
| Bushing | 501050-1 |  |  |  | 1 |  |  |  |  |
| ADM | 501055-1 | PC Board and Panel | $\begin{aligned} & \text { TO-18 } \\ & \text { TO-46 } \\ & \text { TO-52 } \end{aligned}$ | 1 | - | 1 | 1 | 2 | 1 |
|  | 5502136-1 |  |  |  |  |  |  |  |  |
|  | 5502136-2 |  |  |  |  |  |  |  |  |

Figure 1

## 1. INTRODUCTION

The coupling bushing kits and ADM kits listed in Figure 1 are designed to be used with FSMA 905 (Type I) and FSMA 906 (Type II) fiber optic connectors for printed circuit (pc) board and panel mount applications.


Dimensions in this instruction sheet are in metric units [with U.S. customary units in brackets]. Figures are not drawn to scale.

Reasons for reissue of this instruction sheet are provided in Section 5, REVISION SUMMARY.

## 2. DESCRIPTION

The ADM kit houses active devices, such as sources and detectors, and mates with optical fibers that are terminated to FSMA connectors. Compatible active devices are given in Figure 1.
The coupling bushing kit is used to make fiber-to-fiber connections between two FSMA connectors. One kit has an O-ring for sealing; the other kit does not. Each coupling bushing kit is supplied with a hex jam nut and lock washer for panel mounting.
Components of the kits are shown in Figure 1.

## 3. ASSEMBLY AND INSTALLATION

### 3.1. Coupling Bushing Kit

1. Cut the panel using the recommended cutout dimensions given in Figure 2.
2. If supplied, seat the O-ring in the grooved flange of the coupling bushing.
3. Install the coupling bushing in the panel cutout, and secure it using the lock washer and jam nut.
4. Mate an FSMA connector to the coupling bushing. Refer to Figure 3. For FSMA 906 (Type II) connectors, install the long alignment sleeve.
5. Mate the FSMA connectors.

### 3.2. ADM Kit

NOTE The active device can be installed on, and soldered to, the pc board either before or after it is placed in the ADM. Make sure that your choice is compatible with other assembly considerations.

1. Prepare the pc board using the recommended footprint dimensions or cut the panel using the recommended cutout dimensions given in Figure 2. Maximum panel thickness is 1.575 mm [. 062 in.].
[^0]408-9082

Recommended PC Board Footprint for ADM


Recommended Panel Cutout for ADM 501055-1


Recommended Panel Cutout for Coupling Bushing


Recommended Panel Cutout for ADMs 5502136-[]

Note: Not to Scale, All Dimensions Have Tolerance of $\pm 0.08 \mathrm{~mm}[ \pm .003 \mathrm{in}$.]
Figure 2
2. Slip the active device ring around the active device, and insert it into the rear of the ADM. Make sure that the tab on the device is in the slot of the ADM.
3. For pc board mounting, insert the active device leads into the pc board, then secure the ADM to the pc board using the mounting screws. For panel mounting, install the ADM into the panel cutout, and secure it using the lock washer and jam nut.
4. For pc board mounting, solder the active device leads to the pc board.
5. Mate an FSMA connector to the ADM. Refer to Figure 3. For FSMA 906 (Type II) connectors, install the short alignment sleeve.

## 4. REPLACEMENT AND REPAIR

DO NOT use defective or damaged product.
Order kits through your Representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 717-986-7605, or write to:

CUSTOMER SERVICE (038-035)
TYCO ELECTRONICS CORPORATION PO BOX 3608
HARRISBURG PA 17105-3608

## 5. REVISION SUMMARY

Revisions to this instruction sheet include:

- Changed company name and logo
- Added illustrations to Figure 1, removed Kit

501052-1, and changed Kits 502136 to 5502136

- Changed "alignment ring" to "active device ring"
- Added tolerance to dimensions in Figure 2


Installing ADM Kit


Figure 3


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    TOOLING ASSISTANCE CENTER 1-800-722-1111 PRODUCT INFORMATION 1-800-522-6752

