Preprogrammed Printed Circuit (PC) Board DIP Switches (CAUTION - Delicate Electronic Product - Handle With Care)


| SWITCH DESCRIPTION |  |  |  |
| :---: | :---: | :---: | :---: |
| CAM ACTUATION | NO. OF POSITIONS | SEALED BOTTOM $\dagger$ | SEALED BOTTOM AND TAPED $\ddagger$ |
|  | 16 | $53137-5$ | $54792-1$ |
|  | 16 | $53137-6$ | $54792-2$ |
|  | 10 | $53919-2$ | $54778-1$ |
| Extended Shaft | 16 | $54359-1$ | --- |
|  | 10 | $54308-1$ | --- |
| Lever | 2 | $53921-1$ | --- |

$\dagger$ May be hand-soldered or header-mounted only. $\ddagger$ May be wave-soldered, hand-soldered, or header-soldered.
NOTE: Zero and one-positions on lever style switches refer to zero and 15 (or F) positions, respectively, of the truth table in Figure 3.
Figure 1

## 1. INTRODUCTION

This instruction sheet covers installation and cleaning procedures for Preprogrammed Dual In-Line Package (DIP) Switches. See Figure 1 for available switches.


All dimensions on this document are in metric units [with U.S. customary units in brackets]. Figures and illustrations are for identification only and are not drawn to scale.

Reason for revision is given in Section 5, REVISION SUMMARY.

## 2. DESCRIPTION

The four-pole, double-throw switches described in Figure 1 have been designed for logic level circuitry. They have the capability of controlling alternating and direct current (ac and dc) electrical circuits.

The switches are available in 2-, 10-, and 16-position configuration. They can be used in TE Connectivity DIP headers with in-row contact centerline spacing of 2.54 mm [. 100 in.], and row-to-row contact centerline spacing of 7.62 mm [. 300 in.$]$, or they can be soldered directly to the pc board.

## 3. SWITCH INSTALLATION

Determine the number of switch positions required for your application. Determine whether the switch will be soldered directly to the pc board (a sealed switch will be required), or whether the switch is to be installed in a header (an unsealed switch can be used). Refer to the table in Figure 1 for assistance in selecting a switch.

### 3.1. DIP Header Installation

1. Secure DIP header to a pc board according to instructions packaged with the header.
2. Start one row of contact leads into one row of contact cavities in header, then rotate switch until it is parallel with the header (refer to Figure 2).


NOTE: These Same Procedures Apply to Header Installation

## Figure 2

3. Gripping ends of switch push into header until it is bottomed.

### 3.2. PC Board Installation

1. Make a layout on pc board according to dimensions shown in Figure 2.
2. Hold switch at a slight angle and start one row of contact into contact holes. Do NOT over insert.
Switch should be rotated until second row of contact leads is aligned with opposite row of contact holes.
3. Make certain all contact leads have started entry into holes. Grip sides of switch and push switch into pc board until it is bottomed.

## NOTE

To hold switch in place during wave soldering, the four outside contact leads may be clinched outward at $45^{\circ}$. See Figure 3.

## NOTE

For pc board soldering and cleaning procedures, as well as switch settings, refer to TE Application Specification 114-1058.


Figure 3

## 4. SWITCH PROGRAMMING

After switch has been inserted into DIP header or soldered onto pc board, remove tape from sealed switches.

## 5. REVISION SUMMARY

- Updated document to corporate requirements
- New logo

