Technical Manual
76-819091
Rev A

Technical Description 819091
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9091 Universal Matrix Module

The 9091 Universal Matrix module provides an 8-column by 28-row intersecting matrix on a Type 10 printed board. The 9091 is used as a vehicle for the fabrication of simple custom circuits. Resistors, capacitors, diodes and other electrical components can be soldered to the 9091 to construct these circuits.

Modified 9091 modules can be obtained with mounting holes pre-drilled in the module's front panel to accept switches, pushbuttons, LED's, or other control or indicator devices.

The 9091 is generally used in applications where it is necessary to add components, control devices, or indicators to an existing installation of equipment. The 9091 is most often used as an aid in the design of diode matrix or resistive bridge networks.

The matrix is composed of 8 columns of 28 feed-through holes intersected by 28 rows of 8 feed-through holes. The columns are individually bussed to pinouts on the component side of the module, while the rows are bussed to pinouts on the back of the module. Twenty remaining pinouts are individually bussed to feed-through holes that are not crosspoints of the matrix but are provided for strapping to the matrix.

External connections to the 9091 are made via wire wrap to the 56-pin connector at the rear of the module's mounting shelf. Because the 9091 has no front-panel jacks or test points, a 9801 Card Extender is helpful in testing circuitry built on the 9091.

The 9091 Universal Matrix module mounts in one position of a Tellabs Type 10 Mounting Shelf, versions of which are available for relay-rack and apparatus case installation. In relay-rack applications, up to 12 modules can be mounted across a 19-inch rack, while up to 14 modules can be mounted across a 23-inch rack. In either case, 6 inches of vertical rack space is used.

Specifications

matrix arrangement
28 rows by 8 columns, with 20 additional points for strapping

operating environment
dependent upon the nature of associated components

dimensions
5.58 inches (14.17cm) high
1.42 inches (3.61cm) wide
5.96 inches (15.14cm) deep

weight
3.5 ounces (98 grams)

mounting
relay rack or apparatus case via one position of Tellabs Type 10 Mounting Shelf