

## Connector according to IEC 61076-4-101

The **E-Z met** connector system 2.0mm was developed according to the international standard IEC 61076-4-101. As a result, a worldwide standard for the combination of PCBs is safeguarded by multi-contact plug-and-socket connectors for customers. PCBs can be exchanged without problems from system to system. Important parameters like fixing, shielding and coding remain compatible to all applications.

## The spacing

The **E-Z met** connectors have been developed with a spacing of 2 mm between contacts. These connectors are modular and therefore can be stacked together without interrupting the continuity of the 2 mm design. No space is wasted within a row of connectors.

## Module stacking

To improve stacking and to avoid accidental reversal of connectors the end of the housings engage the adjacent connector to insure exact positioning onto the PCB board and give the modules the necessary support.

## Coding

In order to avoid accidental plug-in among PC boards the IEC 61076-4-101 standard provides protection through coding. Coding keys are easily hand inserted into the multifunction block of the connector module A, L and M. The pins are color coded for fast visual recognition.



Recognized under the recognized component Program of Underwriters Laboratories, Inc.  
UL# E176234

## Specifications

Contact Spacing: 2.00mm

Insulator Material: PBT 30% Glass filled UL 94 V-O

Contact Material: Copper Alloy

Shield Material: Copper Alloy

Contact Plating:

Contact Area: Gold

Compliant Area: Matte Tin

Performance: Class 1: 500 cycles

Class 2: 250 cycles

Shield Plating:

Contact Area: Gold

Compliant Area: Matte Tin

Temperature Range: -55 C to +125 C

Contact Resistance: 20 M Ohm Max.

Insulation Resistance:  $10^4$  M Ohm Max.

Working Current: 1.5 ADC (Signal)

Test Voltage: AC 750 V Min.

Compliant Section:

Insertion Force: 100 N per contact Max.

Withdrawal Force: 20 N per contact Min.

Mating Force: .75 N per pin Max.

Withdrawal Force: .15 N per pin Max.

PCB Hole Size Requirements:

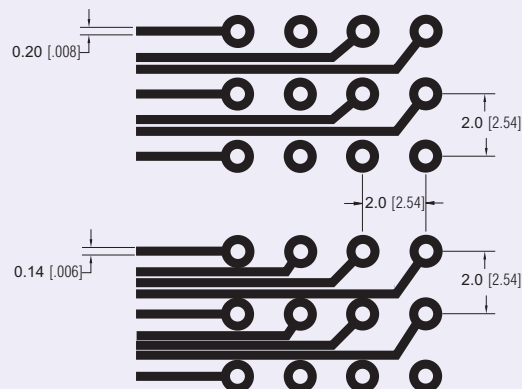
Drilled Hole Diameter:  $0.7 \pm 0.02$ mm

Finished Hole Diameter:  $0.6 \pm 0.05$ mm

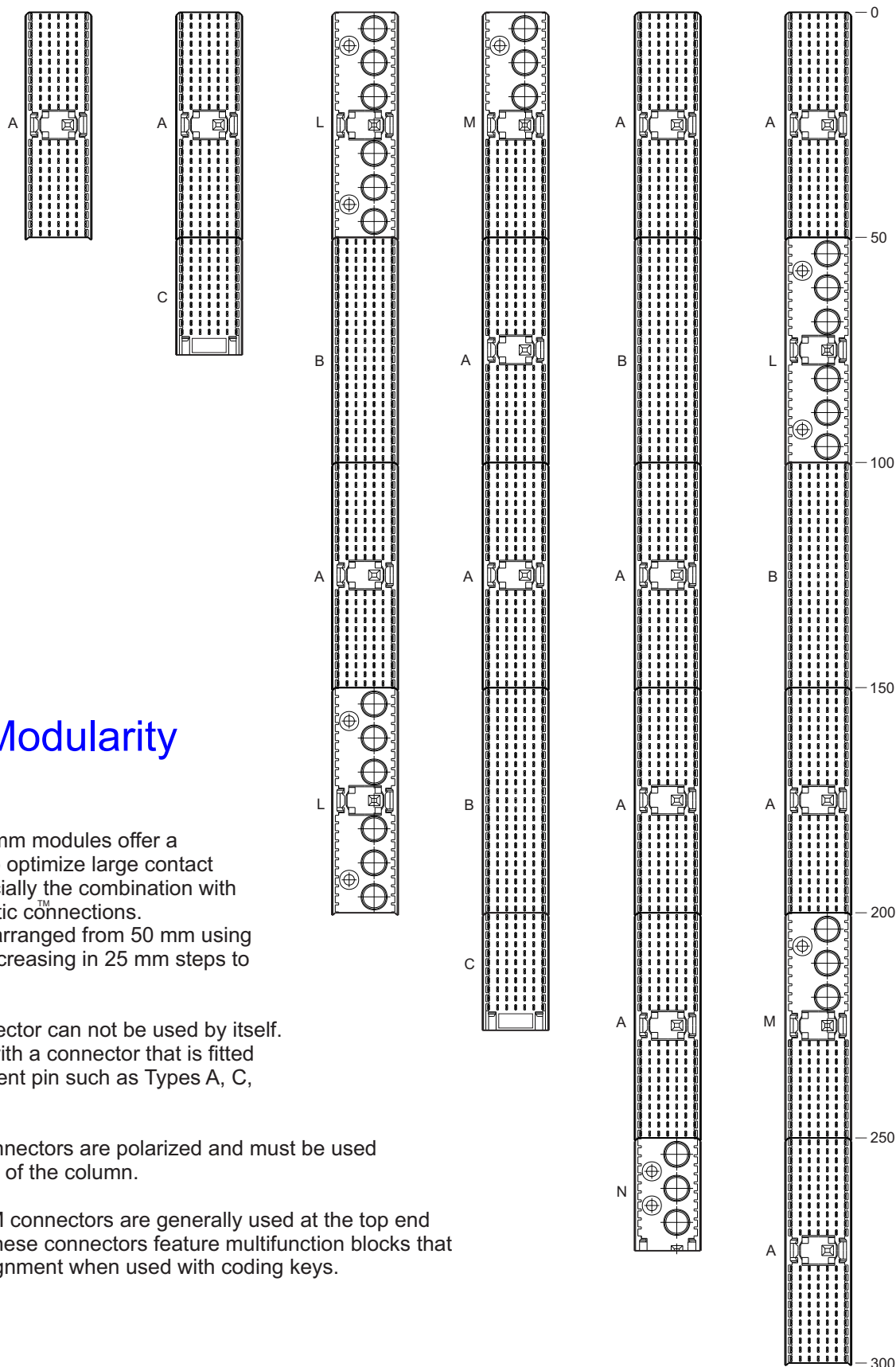
Recommended PCB Thickness: 1.6mm Min.

## Maximum Circuit Density

Using the specified finished through hole diameter of  $0.6 \pm 0.05$  mm, with an appropriate annular ring, the remaining distance between the rings is approximately 1 mm. This will allow for either two equally spaced traces of .2 mm wide, or three equally spaced traces of 0.14 mm wide. Typical patterns are shown on the right.



## Connector System Modularity and Configuration



## System Modularity

The **E-Z met™** 2.0 mm modules offer a great versatility to optimize large contact densities. Especially the combination with coaxial or fiberoptic™ connections. Stacking can be arranged from 50 mm using type A module, increasing in 25 mm steps to required lengths.

The Type B connector can not be used by itself. It must be used with a connector that is fitted with a pre-alignment pin such as Types A, C, L, M, or N.

Type C and N connectors are polarized and must be used at the bottom end of the column.

Types A, L, and M connectors are generally used at the top end of the column. These connectors feature multifunction blocks that assure proper alignment when used with coding keys.