

COMPONENT SPECIFICATION
M50 AND M52 SERIES CONNECTORS

JUNE 2010

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01	----	19.12.00
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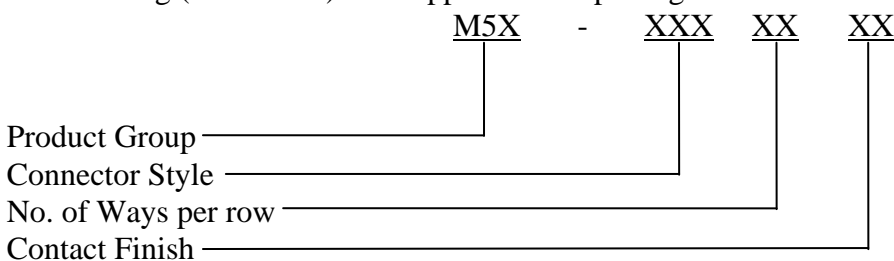
COMPONENT SPECIFICATION M50 AND M52 SERIES CONNECTORS

1. DESCRIPTION OF CONNECTOR AND INTENDED APPLICATION.

A selection of 1.27mm pitch connectors, comprising vertical surface mount, vertical pc tail, horizontal pc tail, plugs and sockets of varying heights. Board-to-board spacing and configuration is obtained by the selection of an appropriate height plug and socket. M50 connectors are spaced 1.27mm between the rows, and are based on 0.40mm square or round pins. M52 connectors are spaced 2.54mm between the rows, and are based on 0.46mm square pins.

2. MARKING OF THE CONNECTOR AND/OR PACKAGE (ORDER CODE).

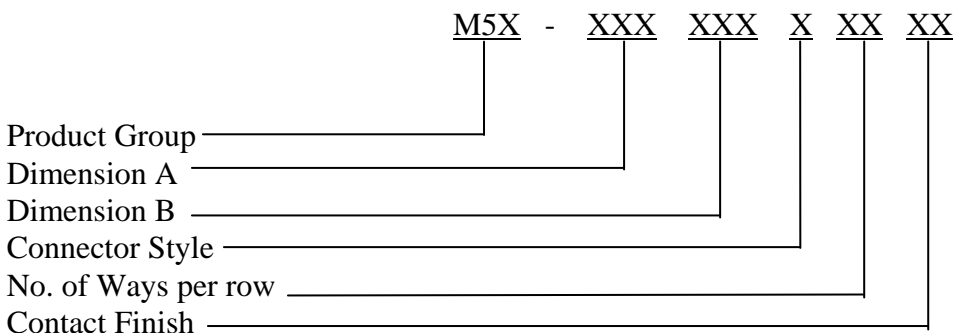
The marking (order code) shall appear on the package and shall be of the following style:



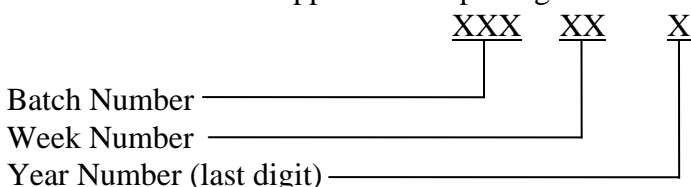
Connector Style:

See individual drawings for connector details.

The marking (order code) for a pin header variant shall appear on the package and shall be of the following style:



The batch code shall appear on the package and shall be of the following style:



The batch number is 001 to 999 repeated each week.

COMPONENT SPECIFICATION
M50 AND M52 SERIES CONNECTORS (CONTINUED)

3. RATINGS.**3.1. MATERIAL & FINISH.**

Materials:

Mouldings.....High Temperature Thermoplastic, UL94V-0 Colour: Black

Contacts:

FemalePhosphor Bronze

Male Brass or High Strength Copper Alloy

Finish:

Contacts05- All over Gold Flash.

42- Gold Flash on Contact area. 100% Tin on PC Tails.

45- All over Gold Flash, RoHS Compliant.

3.2. ELECTRICAL CHARACTERISTICS.

Rated Current (Max Per Contact) 1.0A AC/DC

Rated Voltage (Max)..... 150V AC/DC

Contact resistance (Max) 40 mΩ

Dielectric Withstanding Voltage (Voltage Proof) 500V AC rms for 1 minute

Minimum insulation resistance (Min)..... 1000 MΩ

3.3. ENVIRONMENTAL CHARACTERISTICS.

Operating Temperature Range -40°C to +105°C

Solderability 260°C for 3 seconds

Soldering heat resistance..... 260°C for 5 seconds

Note: Individual components may exceed above ratings – Check individual customer information sheets.

3.4. MECHANICAL CHARACTERISTICS.

Maximum insertion force per contact (average):

M50-3XX, M52-XXX 2.00N

M50-4XX..... 0.60N

Minimum withdrawal force per contact (average):

M50-3XX, M52-XXX 0.30N

M50-4XX..... 0.10N

Durability:

M50-315..... 25 cycles

M50-300, M50-311, M52-XXX 50 cycles

M50-4XX..... 300 cycles

M50-3XX male 600 cycles