

# COMPONENT SPECIFICATION

## M30 SERIES CONNECTORS

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## COMPONENT SPECIFICATION

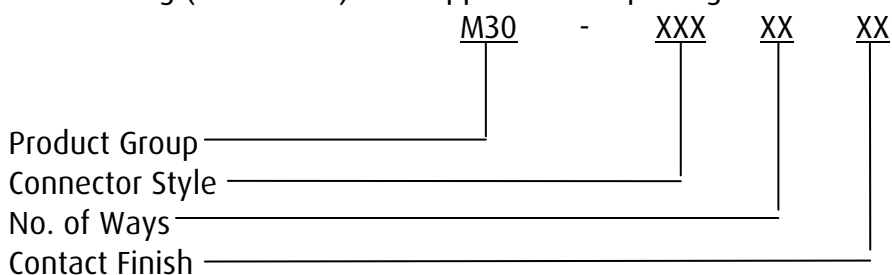
### M30 SERIES CONNECTORS

#### 1. DESCRIPTION OF CONNECTOR AND INTENDED APPLICATION.

A selection of 1.25mm pitch connectors, comprising P.C. tail and surface mount vertical headers and crimp sockets with housings.

#### 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:

Reeled Crimp Socket contacts .....	105
Loose Crimp Socket contacts .....	106
SIL Crimp Housing .....	110
SIL Surface Mount Vertical Header .....	600
SIL P.C. Tail Vertical Header .....	610

#### No. of Ways:

02 to 15

#### Finish:

Tin .....	46
None (Crimp Housing) .....	00

#### 3. RATINGS.

##### 3.1. MATERIAL & FINISH.

###### Materials:

Crimp Moulding .....	Nylon 66, UL94V-0
Header Mouldings .....	Nylon 6T, UL94V-0
Crimp Contact .....	Phosphor Bronze
Header Contacts .....	Brass
SMT Retainers .....	Phosphor Bronze

###### Finish:

Crimp Contact .....	2.03 $\mu$ - 2.54 $\mu$ 100% Tin over 0.76 $\mu$ Nickel
Header Contacts .....	2.03 $\mu$ - 2.54 $\mu$ 100% Tin over 0.76 $\mu$ Nickel
SMT Retainers .....	2.03 $\mu$ - 2.54 $\mu$ 100% Tin over 0.76 $\mu$ Nickel

##### 3.2. ELECTRICAL CHARACTERISTICS.

Current Rating .....	1.0A AC/DC MAX
Voltage Rating .....	150V AC/DC MAX
Contact Resistance .....	30 m $\Omega$ MAX
Dielectric Withstanding Voltage .....	500V AC rms for 1 minute
Insulation Resistance .....	500 M $\Omega$ MIN

## **COMPONENT SPECIFICATION**

### **M30 SERIES CONNECTORS (continued)**

#### **3. RATINGS (continued).**

##### **3.3. ENVIRONMENTAL CHARACTERISTICS.**

Temperature Range.....	-25°C to +85°C
High temperature, short term (no electrical load).....	10 seconds at 260°C
Thermal Shock.....	5 cycles of -55°C (30 minutes) to +85°C (30 minutes)
Heat Resistance .....	85°C for 96 hours
Cold Resistance.....	-25°C for 96 hours
Humidity.....	90-95% RH at 40°C for 96 hours
Salt Spray.....	5% solution at 35°C for 24 hours
Vibration.....	10-55-10 Hz in 1 minute, 1.5mm amplitude, 2 hours in each X, Y and Z axis
Shock.....	50g (490m/s <sup>2</sup> ) for 11 milliseconds
Solderability.....	5 seconds at 245°C

##### **3.4. MECHANICAL CHARACTERISTICS.**

Durability.....	50 Cycles*
Pin retention in moulding .....	4.9N MIN
Crimp retention in moulding.....	4.9N MIN
Crimp wire retention:	
26AWG.....	18.5N MIN
28AWG.....	8.5N MIN
30AWG .....	7.0N MIN
Insertion force per contact.....	4.9N MAX

\*M30-6X0 & M30-1XX connectors are not designed to be pulled apart or separated easily. These connectors are ideal for one cycle only.