



# HARWIN

## Component Specification

**C02510**

M30 Series Connectors  
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## 1. DESCRIPTION OF CONNECTOR AND INTENDED APPLICATION

A selection of 1.25mm pitch connectors, comprising throughboard and surface mount vertical headers mated to crimp sockets with housings.

## 2. RATINGS

### 2.1. Material & Finish

Housing Material:

For PC Tail or SMT connector ..... Nylon 6T, UL94V-0

For Cable connector..... Nylon 66, UL94V-0

Contact Material:

For PC Tail or SMT connector ..... Brass

For Cable connector..... Phosphor Bronze

SMT Retainer Material..... Phosphor Bronze

Finish (Contacts and SMT Retainer) ..... 2.03-2.54 $\mu$  100% Tin over 0.76 $\mu$  Nickel

### 2.2. Electrical Characteristics

Current Rating ..... 1.0A AC/DC max

Voltage Rating ..... 150V AC/DC max

Contact Resistance..... 30m $\Omega$  max

Dielectric Withstanding Voltage..... 500V AC<sub>rms</sub> for 1 minute

Insulation Resistance..... 500M $\Omega$  min

### 2.3. 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: -55°C (30 mins) to +85°C (30 mins)

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 ..... 10-55-10Hz in 1 minute, 1.5mm amplitude, 2 hours each axis

Shock ..... 50G (490m/s<sup>2</sup>) for 11 milliseconds

Solderability ..... 5 seconds at 245°C

### 2.4. Mechanical Characteristics

Contact Durability..... 50 Cycles\*

*\*Connectors are not designed to be pulled apart or separated easily, and are ideal for one cycle only.*

Contact Retention in Housing ..... 4.9N min

Crimp Wire Retention (Pull-Off Force):

26AWG ..... 18.5N min

28AWG ..... 8.5N min

30AWG ..... 7.0N min

Insertion Force (per contact)..... 4.9N max