

HARWIN

COMPONENT SPECIFICATION – 2.54mm PITCH JUMPER SOCKETS

MAY 2018

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1. DESCRIPTION OF CONNECTOR AND INTENDED APPLICATION

A range of 2.54mm pitch jumper sockets, consisting of a moulded outer body holding phosphor bronze spring contacts. The contacts are either tin plated overall, or selectively gold plated on the contact area. The component is intended to interconnect two adjacent 0.64mm square or round section pins on 2.54mm pitch centres. Connectors can be mounted side by side in either direction on 2.54mm pitch centres. Double and single contact versions are available, with either open or closed tops on the single row versions.

2. RATINGS

2.1. ELECTRICAL CHARACTERISTICS

| | |
|---|-----------------------------|
| Current at ambient temperature..... | 3A max |
| Current at ambient temperature (M758X range)..... | 1A max |
| Working voltage (sea level)..... | 250V DC nominal or AC peak |
| Voltage proof (sea level)..... | 750V rms at 50Hz |
| Voltage proof (sea level, M758X range)..... | 500V AC |
| Contact resistance (initial)..... | 20mΩ max |
| Contact resistance (after conditioning) | 30mΩ max Tin, 25mΩ max Gold |
| Insulation resistance * (initial)..... | 100,000MΩ min |
| Insulation resistance * (hot after conditioning)..... | 1,000MΩ min |
| Insulation resistance (M758X range) | 5,000MΩ min |

(* As measured between two adjacent pins not electrically connected)

2.2. ENVIRONMENTAL CHARACTERISTICS

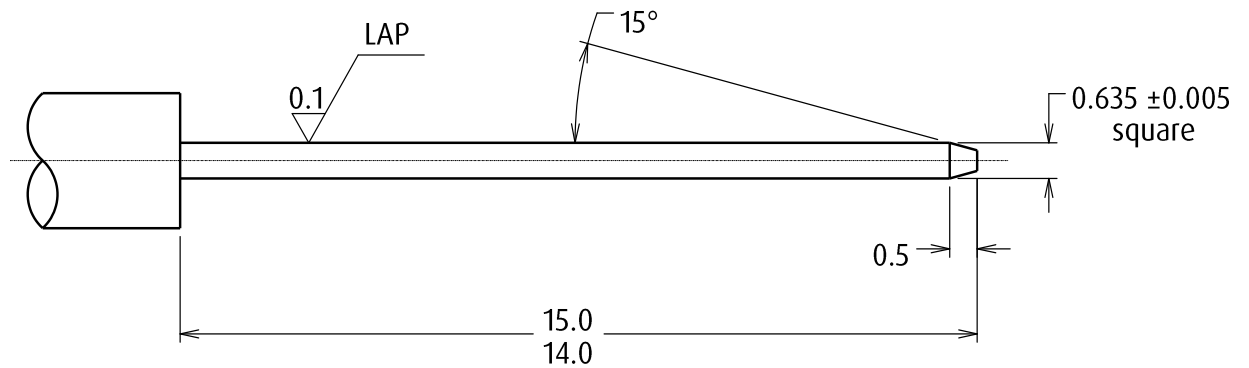
| | |
|--|-------------------|
| Environmental classification..... | 40/85/21 |
| Low air pressure | Severity 300 mbar |
| Operating temperature..... | -40°C to +85°C |
| Operating temperature (M758X range)..... | -55°C to +105°C |

2.3. MECHANICAL CHARACTERISTICS

| | |
|---|--|
| Durability..... | 50 operations Tin, 300 operations Gold |
| High temperature, long term (current as in 2.1.)..... | 1000 hours at 70°C |
| High temperature, short term (no electrical load) | 250 hours at 85°C |
| Contact holding force (with 0.64mm square pin)..... | 100gram deadweight |
| Insertion and withdrawal forces per connector (with 0.64mm square pin): | |
| Insertion force | 14.5N max, 5.0N min |
| Insertion force (M758X range) | 13.7N max, 2.0N min |
| Withdrawal force | 5.0N max, 1.0N min |
| Withdrawal force (M758X RANGE)..... | 7.4N max, 1.0N min |

APPENDIX 1 – GAUGES**NOTES:**

1. Material = Steel to BS1407 or equivalent.
2. Gauging surfaces to be hardened/ground to 650 H.V.5 minimum.
3. These gauges to be used for testing fully assembled components only.
4. Ultimate wear limit of 0.005mm is allowable on gauging diameters.

ENGAGEMENT AND SEPARATION GAUGE**CONTACT PUSH-OUT GAUGE**