

**COMPONENT SPECIFICATION JUMPER SOCKETS****OCTOBER 2014**

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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 an ambient temperature.....	3A max
Current ambient temperature (M75XX RANGE).....	1A max
Working voltage.....	250V DC nominal or AC peak (sea level)
Voltage proof.....	750V rms at 50Hz (sea level)
Voltage proof (M75XX RANGE).....	500V AC
Maximum contact resistance (initially).....	20mΩ Tin, 15m Gold
Maximum contact resistance (after conditioning).....	30mΩ Tin, 25m Gold
Minimum insulation resistance * (initially).....	100,000MΩ
Minimum insulation resistance * (hot after conditioning).....	1000MΩ
Insulation resistance(M75XX RANGE).....	5000MΩ 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 (M75XX RANGE).....	-55°C TO +105°C

2.3. MECHANICAL CHARACTERISTICS.

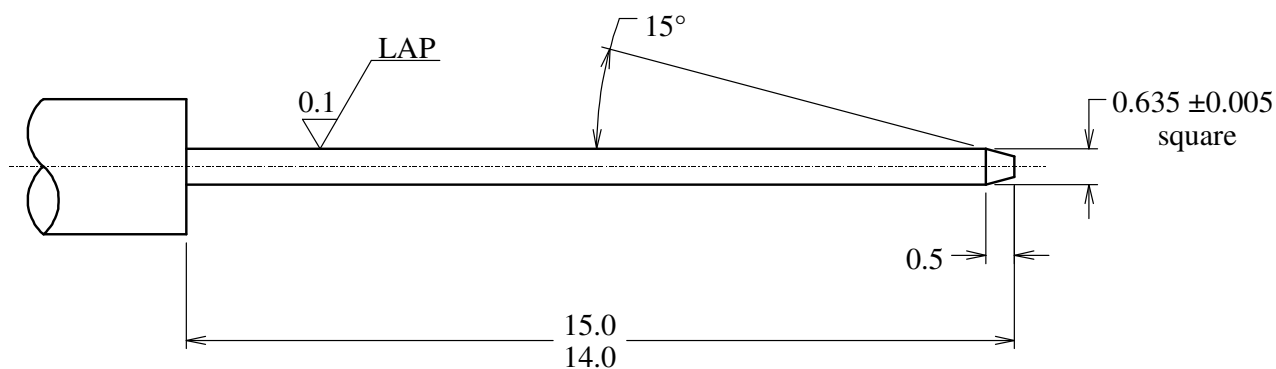
Durability.....	50 operations Tin, 300 operations Gold
High temperature, long term (current as in 3.1.).....	1000 hours at 70°C
High temperature, short term (no electrical load).....	250 hours at 85°C
Contact holding force using 100grm deadweight (using a 0.64mm square pin)	
Insertion and withdrawal forces per pair: (using a 0.64mm square pin)	
Maximum insertion force	14.5N
Minimum insertion force.....	5.0N
Minimum insertion force (M75XX RANGE)	2.0N
Maximum withdrawal force.....	5.0N
Maximum withdrawal force (M75XX RANGE).....	7.4N
Minimum withdrawal force.....	1.0N

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.

