HARWiN

COMPONENT SPECIFICATION: ROUND PIN I.C. SOCKETS
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APPENDICES NOTES:

1. Third angle projection is used where projected views are shown.
2. All dimensions are in millimetres.
3. For explanation of dimensions, etc. see BS308.
4. Unless otherwise stated, all dimensions are maxima.

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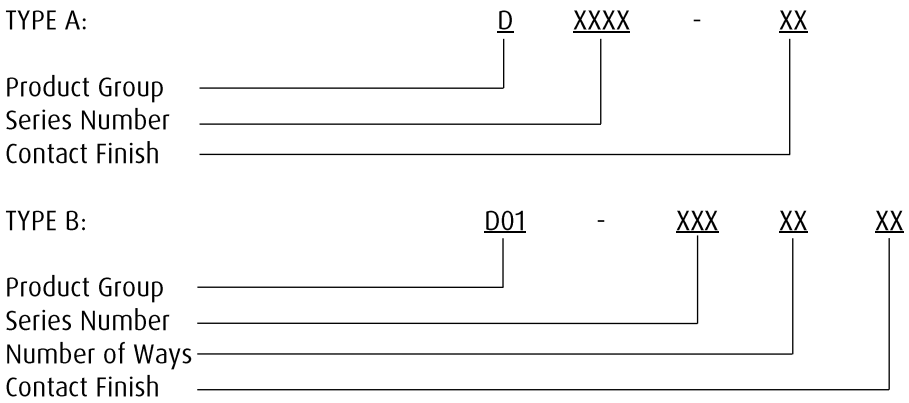
1. DESCRIPTION OF COMPONENT AND INTENDED APPLICATION.

A range of round pin and wire-wrap I.C. sockets intended to accommodate integrated circuits and other components having connection pins. Machined female contacts with gold-plated finish are housed in glass-filled polyester mouldings. Contact surfaces are tin-plated through load solder and wire-wrap terminations. Wire-wrap is available in two types - two-level (9.9mm tails) and three-level (12.9mm tails).

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

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



For details of styles, numbers of ways and finishes see the appropriate drawing.

All packaging should have batch code marked on it.

3. RATINGS.

3.1. ELECTRICAL CHARACTERISTICS.

Current per individual contact at an ambient temperature of 25°C
(When only one contact per connector is electrically loaded) ..... 3A max
Current per individual contact at an ambient temperature of 85°C
(When only one contact per connector is electrically loaded) ..... 1A max
Current per contact through all contacts at an ambient temperature of 25°C..... 1.5A max
Current per contact through all contacts at an ambient temperature of 85°C..... 1.25mA max
Creepage path contact-to-contact ..... 0.7mm min
Air gap contact-to-contact..... 0.7mm min
Maximum contact resistance (initially) 10mΩ
Maximum contact resistance (after conditioning)..... 23mΩ
Minimum insulation resistance (initially)..... 10000MΩ
Minimum insulation resistance (hot after conditioning)..... 100MΩ
Capacitance - 1 contact to all other contacts, and the mounting plate/board,
also between 2 adjacent contacts and all other contacts and mounting
plate/board connected..... 1.5pf max
Dielectric strength..... 1000V rms min
Voltage rating ..... 100V rms/150V DC

3.2. ENVIRONMENTAL CHARACTERISTICS.

Environmental classification..... 55/125/21
Low air pressure severity ..... 300 mbar
Vibration severity..... 10 Hz to 2000 Hz at 0.75mm/10g, duration 6 hours
Shock severity ..... 100g for 6ms
Acceleration severity 50g
Bump severity..... 40g (390m/s^2), 4000 ±10 bumps

3.3. MECHANICAL CHARACTERISTICS.

Durability..... 1000 operations
High temperature, long term (current as in 3.1.)..... 1000 hours at 85°C
High temperature, short term (no electrical load)..... 250 hours at 125°C
Contact shell retention in moulding ..... 20N min
Contact clip retention in shell:
Minimum retention force contact clip from shell from a sample of 10 contacts may be 25N, providing the average of the sample is 37N minimum.
Insertion and withdrawal forces, n = no. of contacts (using pin shown in Appendix A1.1):
Maximum initial insertion force..... 5N x n
Minimum initial withdrawal force, after 3 insertions..... 0.5N x n

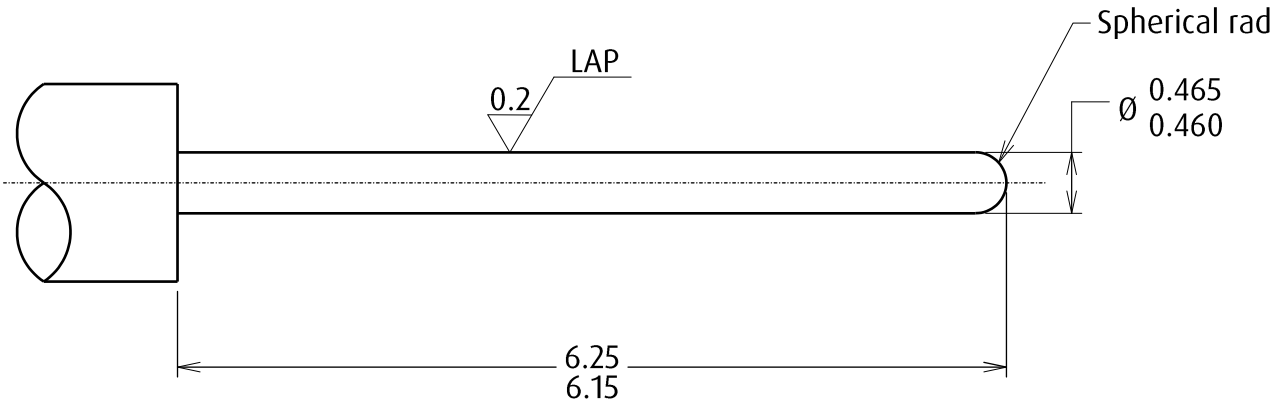
NOTE: Conditioning shall be defined as having 5 insertions and withdrawals following the initial measurements, the final measurements being taken on the fifth insertion and withdrawal.
Pin size – round = Ø0.46mm

APPENDIX 1 - GAUGES.

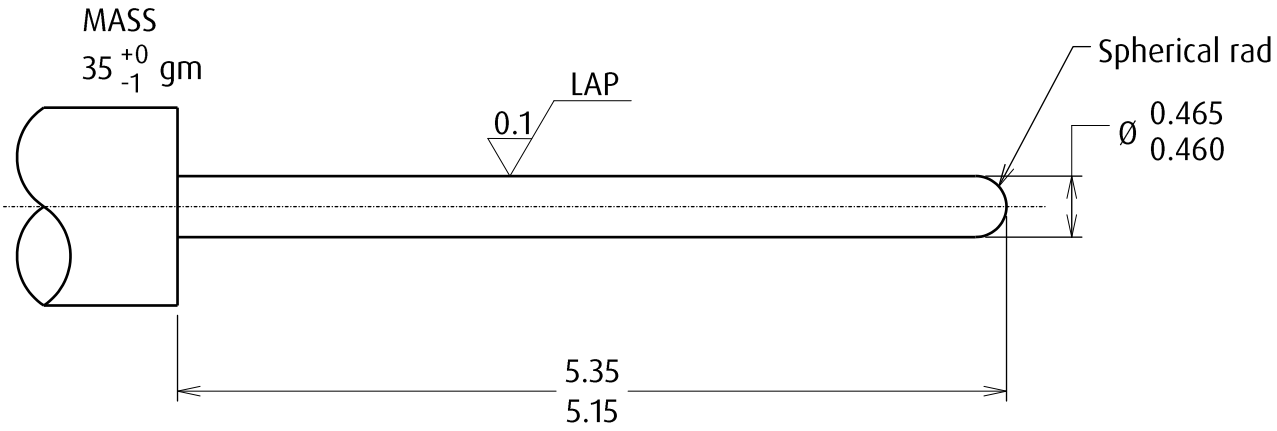
NOTES:

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.

A1.1. SIZING GAUGE.



A1.2. HOLDING GAUGE (after conditioning)



APPENDIX 2 – CONTACT INSERTION DEPTH.

Positive contact made at 2.5 to 3.0mm depth.