



HARWIN

Component Specification

C00417

Round Pin I.C. Sockets
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1. DESCRIPTION OF CONNECTOR 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 contact finish are housed in glass-filled thermoplastic housings. Termination surfaces are tin-plated throughboard solder and wire-wrap terminations. Single row modular and double row styles are available.

2. RATINGS

2.1. Electrical Characteristics

Current Rating (per contact):

One contact per connector is electrically loaded, 25°C ambient 3A max

One contact per connector is electrically loaded, 85°C ambient 1A max

Current per contact through all contacts, 25°C ambient 1.5A max

Current per contact through all contacts, 85°C ambient 1.25A max

Creepage path contact-to-contact 0.7mm min

Air gap contact-to-contact 0.7mm min

Contact Resistance (maximum):

Initial 10mΩ

After conditioning* 23mΩ

Insulation Resistance (minimum):

Initial 10,000MΩ

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 1,000V rms min

Voltage Rating 100V rms/150V DC

** 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, using pin shown in Appendix A1.1.*

2.2. Environmental Characteristics

Environmental Classification 55/125/21

Operating Temperature Range -55°C to +125°C

Low Air Pressure Severity 300 mbar

Vibration Severity 10Hz to 2,000Hz at 0.75mm, 10G, duration 6 hours

Shock Severity 100G for 6ms

Acceleration Severity 50G

Bump Severity 40G (390m/s²), 4,000 ±10 bumps

2.3. Mechanical Characteristics

Durability 1,000 operations

High Temperature, Long Term (current as in 3.1.) 1,000 hours at 85°C

High Temperature, Short Term (no electrical load) 250 hours at 125°C

Contact Shell Retention in Housing 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 force per contact (using pin shown in Appendix A1.1) 5N maximum initial

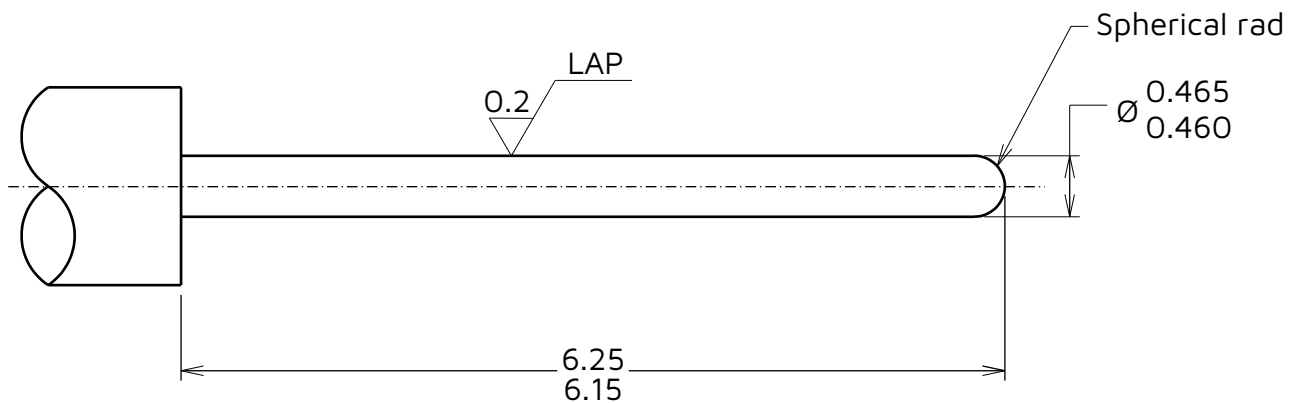
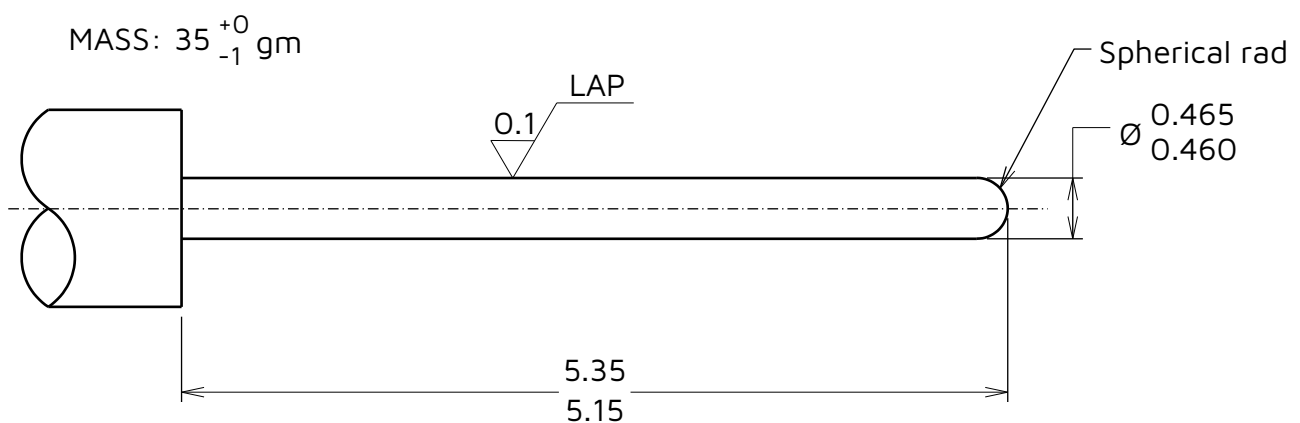
Withdrawal force, after 3 insertions (using pin shown in Appendix A1.1) 0.5N minimum

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.

APPENDIX 1 – GAUGES**NOTES:**

1. Material = Steel to BS1407 or equivalent.
2. Gauging surfaces to be hardened/ground, 650 HV5 min.
3. These gauges to be used for testing fully assembled components only.
4. Ultimate wear limit 0.005mm is allowable on gauging dimensions.

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.

