

**COMPONENT SPECIFICATION****ROUND PIN I.C. SOCKETS**

FEBRUARY 1997

**CONTENTS:**

SECTION	TITLE	PAGE
1	Description of Connector and Intended Application	2
2	Marking of Connector and/or Package	2
3	Rating	3
Appendix 1	Gauges	4
Appendix 2	Contact insertion depth	5

**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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<u>ISSUE</u>	<u>C/NOTE</u>	<u>DATE</u>
01	----	20.01.86
02	988	12.06.86
03	1166	15.10.87
04	1567	30.01.90
05	1682	07.08.90
06	1838	10.06.91
07	1881	02.09.91
08	1937	12.02.92
09	2014	01.06.92
10	2429	05.10.93
11	3398	08.07.96
12	3773	27.02.97



**COMPONENT SPECIFICATION**  
**ROUND PIN I.C. SOCKETS (continued)**

**3. RATINGS.**

**3.1. ELECTRICAL CHARACTERISTICS.**

Current per individual contact at an ambient temperature of 25°C .....	3A max
(When only one contact per connector is electrically loaded)	
Current per individual contact at an ambient temperature of 85°C .....	1A max
(When only one contact per connector is electrically loaded)	
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.....	250mA max
Creepage path contact-to-contact .....	0.7mm min
Air gap contact-to-contact .....	0.7mm min
Maximum contact resistance (initially) .....	15mΩ
Maximum contact resistance (after conditioning) .....	23mΩ
Minimum insulation resistance (initially) .....	1000MΩ
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

**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/10gn, duration 6 hours
Shock severity.....	100gn for 6ms
Acceleration severity .....	50gn
Bump severity.....	40gn 390m/s <sup>2</sup> , 4000 ±10 bumps

**3.3. MECHANICAL CHARACTERISTICS.**

Durability:

01 and 05 finish .....	1000 operations
21 finish .....	250 operations
T6 finish.....	50 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: withdrawal = Ø0.46mm  
insertion = Ø0.46mm

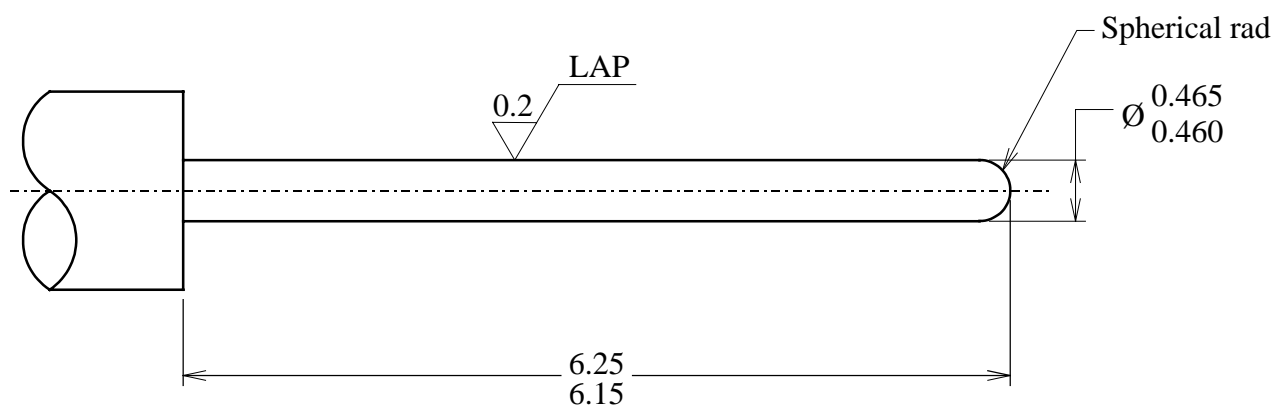
**COMPONENT SPECIFICATION**  
**ROUND PIN I.C. SOCKETS (continued)**

**APPENDIX 1 - GAUGES.**

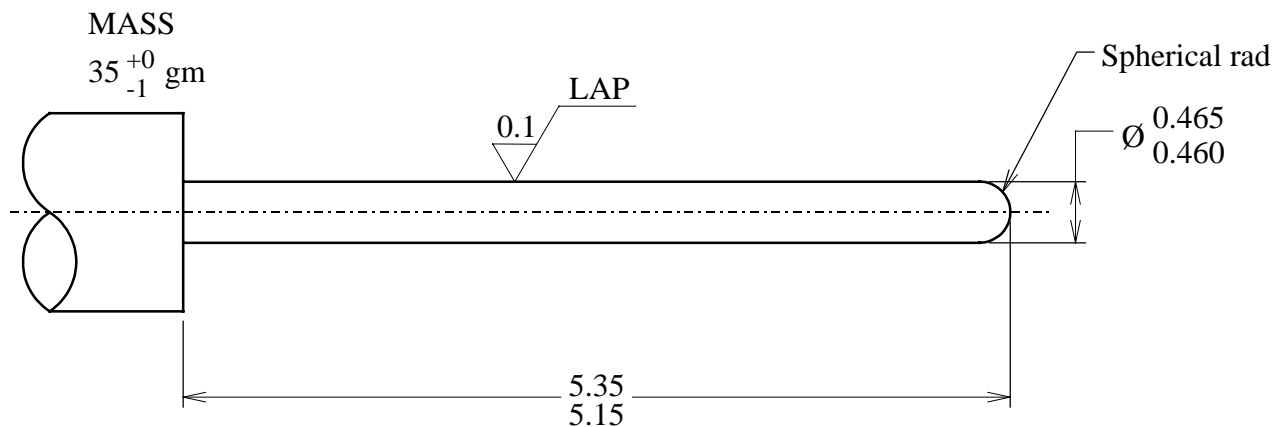
**NOTES:**

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)**



**COMPONENT SPECIFICATION**  
**ROUND PIN I.C. SOCKETS (continued)**

**APPENDIX 2 - CONTACT INSERTION DEPTH.**

Positive contact made at 2.5 to 3.0mm depth.

