

PLCC Test Interface - 20 pin, 50 Thou Pitch Swan Part No. CLIP 41-1720

Page 1 of 2 Issue 1 20/02/2013

Introduction

This Test Interface is a hand held test clip, designed to probe simultaneously the leads of an assembled IC. Terminated with one 25 way male "D" type connectors, the interface makes temporary electrical contact with the leads of the device, in a two step action:

It's primary use is to directly interface with a NON-Socketed PLCC, however, there are some instances where the device can be tested whilst it is in its PLCC socket (depending on the socket type). This clip is not an 'underside' test clip.

- the interface is positioned over the device to be tested (Lining it up with the body of the device and the leads).
- Once the CLIP has located on the device, by pushing the handle further, the high-performance microprobes will reach the leads of the device and make electrical contact.

Features

- achieves the best combination of reliability, repeatability, serviceability and user-friendliness;
- high contact pressure at probe tip, for repeatable and reliable contact;
- high reliability and long life interchangeable microprobes;
- sweeping action gold plated contacts, for reliable contact and low ohmic resistance of interconnections;
- high current rating (for single channel, in ambient air with 70°F [20°C]) : 1.5A
- impact, solvent and temperature resistant plastics, with low friction;
- wide range of operating temperatures (commercial): [0°C to +70°C]
- clear markings on the body, indicating Pin 1 of IC being tested, to prevent probing the wrong way round;
- packaged in a hard wearing, high resistance to damage Polypropylene case with foam insets, the Test Interface can whitstanding high impact in transit.
- case can be used for safe storage when the Test Interface is not in use, and subsequent transport.



The copyright in this work is vested in Diagnosys Test Systems Limited. The document is issued in confidence solely for the purpose for which it is supplied. Reproduction in whole or in part or for use for tendering or manufacturing purposes is prohibited except under an agreement with or with the written consent of Diagnosys Test Systems Limited and then only on the condition that this notice is included in any such reproduction. Diagnosys Test Systems Limited has a policy of continuous improvement and reserves the right to change technical specifications at any time without prior notice. Diagnosys Test Systems Limited does not accept liability for errors or misprints in this document.

does not accept liability for errors or misprints in this document.

Diagnosys Test Systems Limited can provide a full range of test clips to meet individual requirements. Any common device packaging styles can be accommodated, or custom designed clips manufactured, for device pitches of 0.4mm and above.



PLCC Test Interface - 20 pin, 50 Thou Pitch Swan Part No. CLIP 41-1720

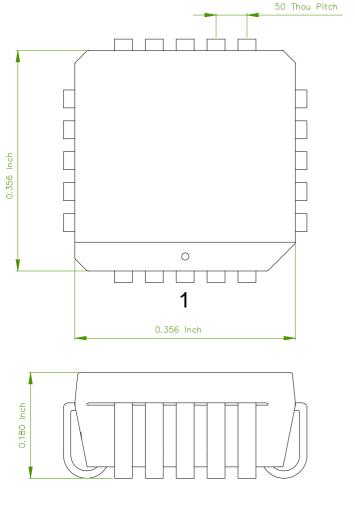
Specification

- It will accommodate an unsocketed 20 Pin PLCC Device (50 Thou Pitch) LxWxH: 0.356 Inch x 0.356 Inch x 0.180 Inch;
- It will accommodate the the PLCC in some PLCC Sockets;
- Maximum number of interconnections (channels): 20
- Current rating, with all contacts loaded (maximum continuous current, non inductive): 0.5A /channel;
- Contact resistance (average): 80 m Ω_{15} /channel;
- Insulation resistance: $5M\Omega$ Min.
- Volume resistivity of plastic parts: 10 $\,$ $\,$ $\Omega\text{-cm}$ @ 50%RH.
- Fatigue life of probes: Min. 1,000,000 cycles at normal working distance;
- Working distance (normal stroke): 1.8mm;
- Microprobe force at point of contact (normal stroke): 0.3N.

Connections Table

Pin tables for this clip are available electronically:

- for DiagnoSYS employee's goto the R&D section on the DiagnoSYS intranet.
- for customers please contact DiagnoSYS sales.



NOTES

1) All dimensions in mm, unless otherwise specified.

x1 configuration order o dependant \bigcirc 20

Maintenance

The Test Interface Head is maintenance free. The microprobes are self-cleaning. Immersion in water or contact between microprobes and any liquids should be avoided, as this could severely reduce the working life of microprobes.

Contamination is the primary cause of probe contact problems. This is generally caused by flux left as a residue on circuit boards. Other probe contaminants such as dust, fluff, oil and grime can also cause problems in other areas. Light brushing of the tips of the probes with nylon, bristle or soft metal brushes will dislodge most contaminants.