

Introduction

This Test Interface is a hand held test clip, designed to probe simultaneously the leads of an assembled IC. Terminated with two 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 withstand high impact in transit.
- case can be used for safe storage when the Test Interface is not in use, and subsequent transport.



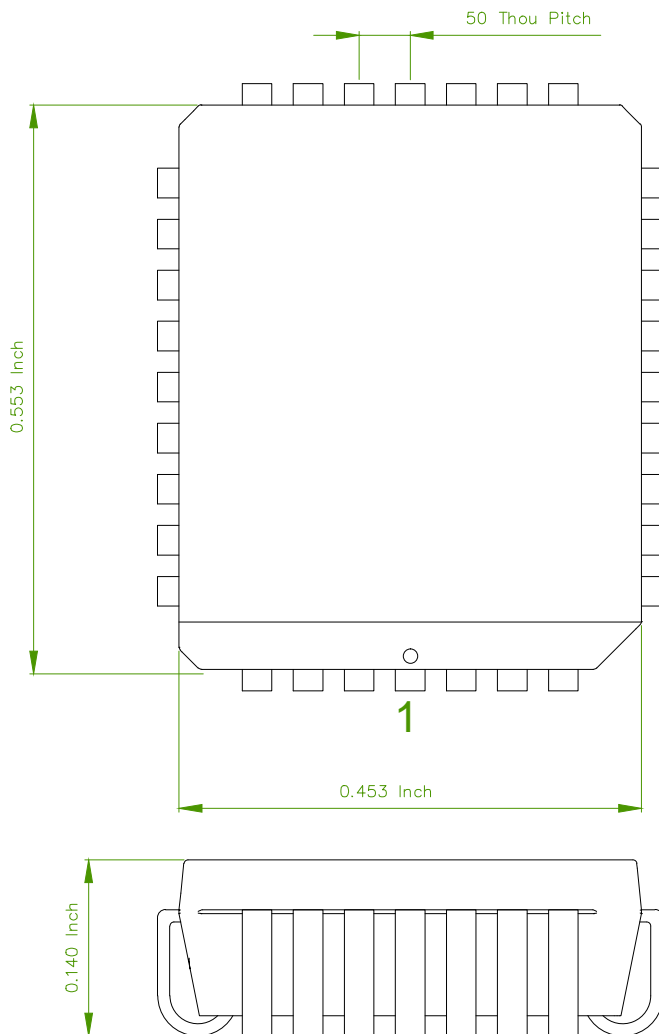
Specification

- It will accommodate an unsocketed 32 Pin PLCC Device (50 Thou Pitch) LxWxH: 0.553 Inch x 0.453 Inch x 0.140 Inch;
- It will accommodate the the PLCC in some PLCC Sockets;
- Maximum number of interconnections (channels): 32,
- Current rating, with all contacts loaded (maximum continuous current, non inductive): 0.5A /channel;
- Contact resistance (average): $80\text{ m}\Omega_{15}$ /channel;
- Insulation resistance: $5\text{M}\Omega$ 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.

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.

