

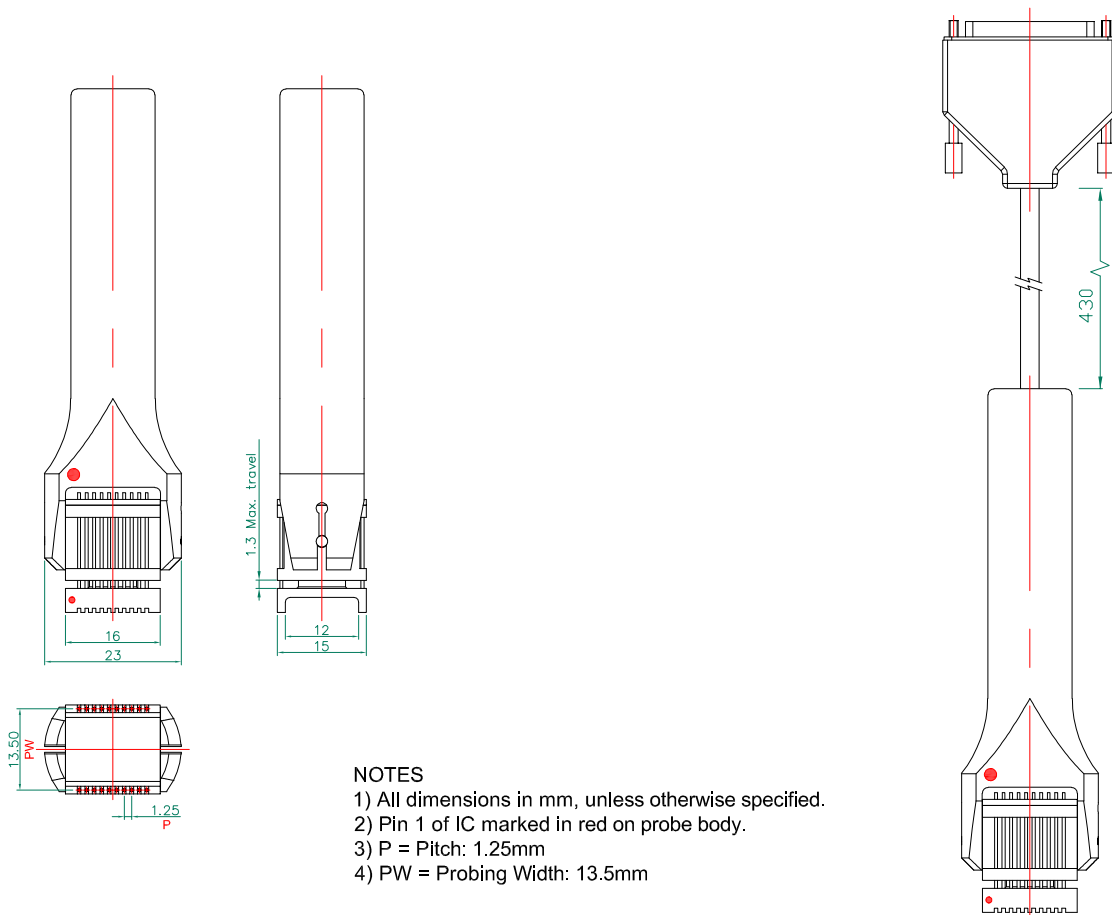
Introduction

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

- the interface is positioned over the device to be tested and by pressing gently on the handle, the interface is lined up with the body of the device and the leads;
- 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;
- spring loaded 3 point crown head microprobes, plated gold over nickel, with very high contact pressure, for reliable and repeatable contact;
- high current rating (for single probe in ambient air with 70°F [20°C] : up to 2A)
- replaceable microprobes, for easy and low cost repair: should a probe get damaged or wear out, it can simply be de-soldered and replaced, without dis-assembling the Test Interface;
- very low ohmic resistance interconnections, due to sweeping action & gold-over-nickel plating;
- 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;
- very flexible cable (military quality harnessing) with low friction, high performance TFE TEFLON insulated wires (MIL-W-16878E Type E, UL1213);
- 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.



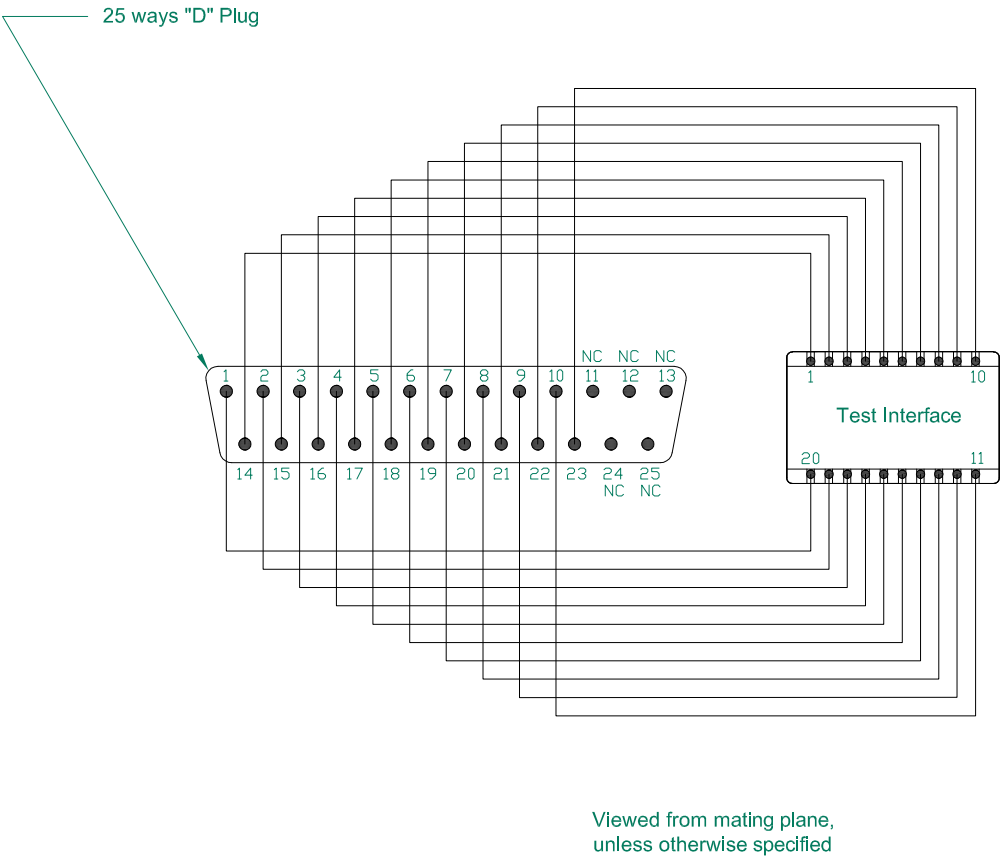
Characteristics

- It will accommodate the following IC body styles: CSOP, PSOP, Cerpack, Flatpack;
- Maximum body size of IC: (LWH) 16 x 12 x 3 mm;
- Mechanical life of microprobes: approx. 10000 cycles;
- Working travel: 1.3mm;
- Microprobe spring force, at initial contact point: 0.1N;
- Microprobe spring force, at working travel: 0.2N;
- Current rating (maximum continuous current, non inductive, at working travel): 1A /channel;
- Volume resistivity of plastic parts: $10^{15} \Omega\text{-cm}$ @ 50%RH.

Connections Table

IC Pin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
D Connector Pin	14	15	16	17	18	19	20	21	22	23	10	9	8	7	6	5	4	3	2	1

Wiring Diagram



Maintenance

The Test Interface is maintenance free. The 3-point microprobes are self-cleaning. Immersion in water or contact between the 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.