

80 Pin 0.5mm Pitch QVSOP Test Clip Model No. PTC080QVS07Z4; Part No. 41-0012

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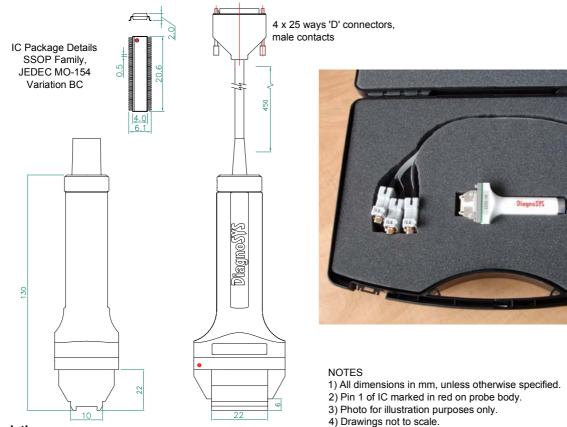
Introduction

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

- 1) Alignment: the clip is positioned over the device to be tested and aligned with the body and the pins of the device, using minimal force;
- 2) Test: by pushing the handle further, the high-performance microprobes will reach the leads of the device and make electrical contact. The contact is maintained as long as the Test Clip is held in this test position.

Features

- achieves the best combination of reliability, repeatability, serviceability and user-friendliness;
- ability to probe in tightly packed areas, with minimal overhang outside perimeter of the IC being tested;
- great visibility of IC being tested and surrounding area during positioning, aligning and testing;
- spring loaded probes should a probe become damaged or worn, it can be replaced individually by specialist repairer;
- high contact pressure at probe tip, for repeatable and reliable contact;
- long life type microprobes, with heat-treated BeCu/plated gold over nickel tips;
- 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 temperature (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;
- provisions for correct physical alignment with the leads of the IC under test, effectively preventing misalignment (registration on the pins);
- provisions for preventing short circuits, in the event of misalignment;
- probes retracted when not in use, to protect from damage;
- packaged in a hard wearing, high resistance to damage Polypropylene case with foam insets, the Test Clip can withstand high impact in transit.
- case can be used for safe storage when the Test Clip is not in use, and subsequent transport.



Characteristics

- It will accommodate 80 Pin QVSOP, 0.5mm pitch, body size (LxWxH) 20.6 x 4.0 x 2.0 mm;
- Maximum number of interconnections (channels): 80
- Current rating, with all contacts loaded (maximum continuous current, non inductive): 0.5A /channel;
- Contact resistance (average): 80 m Ω /channel:
- Insulation resistance: $5M\,\Omega$ Min.
- Fatigue life of probes: Min. 1,000,000 cycles at normal stroke;
- Working distance (normal stroke): 1.5mm;
- Microprobe force at point of contact (normal stroke): 0.3N

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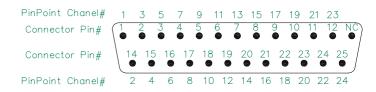
noSYS can provide a full range of test clips to meet individual requirements. Any common device packaging styles can be accommodated, or custom designed clips manufactured, for device pitches of 0.5mm

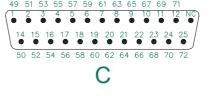
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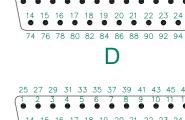
Connections

_	Pin :- 1>> Channel :- 8	🕍 Pin :- 41>> Channel :- 87
_	Pin :- 2>> Channel :- 9	III Pin :- 42>> Channel :- 88
*	Pin :- 3>> Channel :- 4	
*	Pin :- 4>> Channel :- 5	🚠 Pin :- 44>> Channel :- 91
	Pin :- 5>> Channel :- 10	I Pin :- 45>> Channel :- 96
*	Pin :- 6>> Channel :- 1	I Pin :- 46>> Channel :- 95
*	Pin :- 7>> Channel :- 57	I Pin :- 47>> Channel :- 39
	Pin :- 8>> Channel :- 3	∄ Pin :- 48>> Channel :- 93
*	Pin :- 9>> Channel :- 53	# Pin :- 49>> Channel :- 40
*	Pin :- 10>> Channel :- 51	∄ Pin :- 50>> Channel :- 45
*	Pin :- 11>> Channel :- 49	⚠ Pin :- 51>> Channel :- 43
*	Pin :- 12>> Channel :- 55	☑ Pin :- 52>> Channel :- 41
*	Pin :- 13>> Channel :- 11	⚠ Pin :- 53>> Channel :- 90
*	Pin :- 14>> Channel :- 54	⚠ Pin :- 54>> Channel :- 44
<u>*</u>	Pin :- 15>> Channel :- 12	⚠ Pin :- 55>> Channel :- 85
$\overline{\mathbb{T}}$	Pin :- 16>> Channel :- 59	⚠ Pin :- 56>> Channel :- 46
$\overline{\mathbb{T}}$	Pin :- 17>> Channel :- 7	⚠ Pin :- 57>> Channel :- 82
$\overline{\mathbb{T}}$	Pin :- 18>> Channel :- 60	Pin :- 58>> Channel :- 42
$\overline{\mathbb{T}}$	Pin :- 19>> Channel :- 6	# Pin :- 59>> Channel :- 89
*	Pin :- 20>> Channel :- 50	⚠ Pin :- 60>> Channel :- 37
$\overline{\mathbb{T}}$	Pin :- 21>> Channel :- 94	⚠ Pin :- 61>> Channel :- 92
$\overline{\mathbb{T}}$	Pin :- 22>> Channel :- 72	⚠ Pin :- 62>> Channel :- 34
Ŧ	Pin :- 23>> Channel :- 81	⚠ Pin :- 63>> Channel :- 15
$\overline{\mathbb{T}}$	Pin :- 24>> Channel :- 62	Pin :- 64>> Channel :- 28
$\overline{\mathbb{T}}$	Pin :- 25>> Channel :- 76	Pin :- 65>> Channel :- 2
	Pin :- 26>> Channel :- 63	∄ Pin :- 66>> Channel :- 32
$\overline{\mathbb{H}}$	Pin :- 27>> Channel :- 80	A Pin :- 67>> Channel :- 24
\equiv	Pin :- 28>> Channel :- 64	I Pin :- 68>> Channel :- 33
$\overline{\mathbb{T}}$	Pin :- 29>> Channel :- 65	I Pin :- 69>> Channel :- 14
$\overline{\mathbb{T}}$	Pin :- 30>> Channel :- 67	I Pin :- 70>> Channel :- 29
*	Pin :- 31>> Channel :- 68	III Pin :- 71>> Channel :- 31
$\overline{\mathbb{T}}$	Pin :- 32>> Channel :- 71	∄ Pin :- 72>> Channel :- 25
$\overline{\mathbb{H}}$	Pin :- 33>> Channel :- 74	I Pin :- 73>> Channel :- 30
$\overline{\mathbb{T}}$	Pin :- 34>> Channel :- 77	I Pin :- 74>> Channel :- 23
$\overline{\mathbb{T}}$	Pin :- 35>> Channel :- 84	I Pin :- 75>> Channel :- 13
$\overline{\mathbb{H}}$	Pin :- 36>> Channel :- 73	Pin :- 76>> Channel :- 21
$\overline{\mathbb{T}}$	Pin :- 37>> Channel :- 83	Pin :- 77>> Channel :- 18
$\overline{\mathbb{T}}$	Pin :- 38>> Channel :- 75	Pin :- 78>> Channel :- 17
	Pin :- 39>> Channel :- 78	Pin :- 79>> Channel :- 22
=	Pin :- 40>> Channel :- 79	⚠ Pin :- 80>> Channel :- 20
	is a summing to	

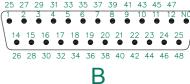
Connector Pin / PinPoint Channel mapping











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.

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