

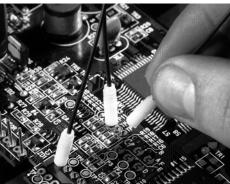
Features

- Unique retention mechanism enhances reliability through low stress connections.
- Minimum contact resistance (less than 2 mΩ) through 8 points of contact.
- Chamfer design allows excellent solder fillets to be formed.
- Available loose or taped and reeled.
- Award winning kinematic design allows rapid connection/disconnection.
- Proven application through Snaplox range of test points.
- Hand or automatic assembly.





SMOX[®] Surface Mount Test



Surface Mount Applications

Surface-Mount Oxley (SMOX) Test-Point is available Taped and Reeled, with a compatible mating socket and is suitable for a range of applications.

Due to the unique nature of the SMOX Connection System, it represents the only Surface Mount Test Point available on the market with a specially designed socket for easy low contact resistance and gentle detachment; the applications and potential uses are limitless.

Requiring a minimum pad size of only two millimetres (0.080"), and being a singlepole device, the SMOX can be placed accurately by any Pick and Place machine in even the most congested designs. The socket is normally used with the recommended PTFE Insulated Sleeve, (diameter 3.2 mm/ 0.128"), but for those very close pitch designers, this can be replaced with alternative insulation techniques.

Detecting and localising board faults is an obvious application, where the ability to quickly and individually identify faulty components, cracked solder joints or short circuits can save time of testing via an edge mounted connector, or under a microscope.

On thick multilayered boards, where complex track designs can lead to very expensive PCB's, the benefits of quickly and effectively identifying and repairing any faulty populated PCB can be easily recognised.

The ability to monitor waveform characteristics and determine the performance of a circuit with variable components is vital, and not just in a test laboratory. Where exact frequency output is required, a certain waveform is needed or the ability to manually set the characteristics of each production board manufactured; the inclusion of SMOX Test Points fulfils that requirement.

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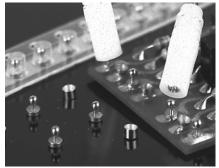


Key Characteristics

Gold plated SMOX Test Point for low contact resistance and durability.

SMOX Connector Systems to reduce the risk of accidental damage to the PCB. Can be used on any Pick and Place machine using vacuum nozzles.

Square or round solder pads can be used, with a minimum pad size of 2 mm diameter.



Sockets are gently detached when moved beyond an angle of 30° from vertical.

Packaging

The SMOX/060/B1LP.R3K Test Point is available on Tape and Reel, to enable placement on to PCB's by a variety of pick and Place machines. The plastic reels are an industry standard 7" diameter and the R3K extension denotes 3,000 components in a specially designed carrier tape.

The SMOX/060/B1-R2K test point is available on Tape and Reel, to enable placement on to PCB's by a variety of pick and Place machines. The plastic reels are an industry standard 7" diameter and the .R2K extension denotes 2,000 components in a specially designed carrier tape.

The solid flat bottomed pocket ensures the component is in the correct vertical position when the heat sealing backing tape is peeled off. 100% visual inspection by camera during population of the tape ensures no components are heat sealed in place in the wrong position, or that empty pockets can be sealed.

For customers requiring the SMOX Socket to be supplied assembled, a standard product is available on 15" of cable, with differing lengths possible where demand exists.

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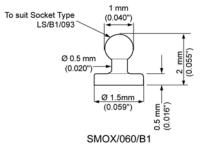
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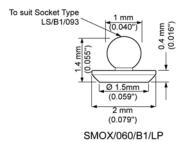
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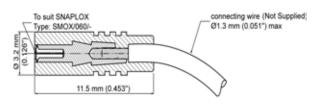


SMOX Surface Mount Test Points

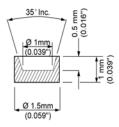




Wires shown for illustration purposes only.



LS/B1/093 SMOX SOCKET



SMOX/060/TP CONTACT TEST POINT

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Materials

Test Point	Copper Alloy	
Socket Body	Copper Alloy	
Insulation	High dispersion grade PTFE standard colours - white, black and red. Other colours available on request.	
Finishes		
Standard	Gold	
Options	Palladium, Silver, Nickel or Tin Lead	
Socket	Silver	

Characteristics

Maximum Contact Resistance (with socket)	2 milliOhms
Maximum Angular Movement before Disconnection	±30°
Socket Insulation Resistance	10,000 MOhms minimum
Typical Retention Force (angles less than 60° or ±30°) off perpendicular	0.2 kgs
Typical Retention Torque (angles greater than 30°) or perpendicular	200 gcm
Current for 10°C Rise Above Ambient	3 A
Climatic Category	-55 to +125 °C, 56 days damp heat (IEC 68:55/125/56)
Solderability	Exceeds Requirements of BS 2011 (IEC 68) Test T

Assembly Tools

Tool Numbers Required	AT1/KP18 and AT1/KP19
for SMOX Sockets (LS/	
B1/093) Assembly	

Taping and Reeling

Таре	4 mm pitch 8 mm wide
Reel Sizes: SMOX/060/B1/LP.R3K 7 inch	3,000 components
Reel Sizes: SMOX/060/B1.R2K 7 inch	2,000 components

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