

Full Work Station Kit

TECHNICAL DATASHEET

KSWKS 7/8

Description

Our full work station kit provides a quick and easy way to set up your electronics workbench; giving you full protection against any static generation.

Bondline's full work station kit is manufactured to give full static protection when handling static sensitive devices in a production or test environment. They are designed to keep you grounded when working with static-sensitive devices. This includes printed circuit boards, computer motherboards, hybrid bio-electronic devices and more. Compliant according to IEC-61340-1-5 International Standard and RoHS and REACH standards. CE approved.



Compliant according to IEC-61340-1-5 International Standard



Manufactured in the United Kingdom

Supplied With

- ⚡ x1 Static Dissipative 2-Layer Rubber Bench Mat (KSMLF)
- ⚡ x1 Static Dissipative Floor Mat (BFM)
- ⚡ x1 Premium Coil Cord (CCS)
- ⚡ x1 Straight Grounding Lead (SCJ)
- ⚡ x1 Premium Wrist Strap (HCA10)
- ⚡ x1 Earth Bonding Plug (BP)
- ⚡ x1 Rigid ESD Awareness Sign



Part Code	Bench Mat Size
KSWKS7	1200 x 600mm
KSWKS8	1500 x 600mm

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Premium Textured Bench Matting (KSMLF)



Physical Properties	Typical Values
Thickness	0.076 (2.00mm)
Hardness - Upper Dissipative Layer	70 -5 + 5 shore A (Per ASTM D2240)
Hardness - Lower Conductive Layer	75 -5 + 5 shore A (Per ASTM D2240)
Scratch Resistance	No clear scratch and well recovery
UV Resistance	No major disc
Stud Force	6KG/ 59cm (Recommended)
Heat Resistance	Resist holds irons and hot paste, rubber doesn't melt if in contact with hot metal parts and soldering debris
300% Tensile Strength - Upper Dissipative Layer	3.7Mpa
300% Tensile Strength - Lower Conductive Layer	3.7Mpa
Breaking Strength - Upper Dissipative Layer	18.7Mpa
Breaking Strength - Lower Dissipative Layer	3.7Mpa
Elongation At Break - Upper Dissipative Layer	690Mpa
Elongation At Break - Lower Dissipative Layer	250Mpa
Hardness - Upper Dissipative Layer	66°
Hardness - Lower Dissipative Layer	80°

Electrical Properties	Typical Values
Charge Decay	< 0.1 sec per FTMS 101C, M4046, TB-WINT-0008
Charge Generation	< 100 volts per ANSI/ ESD STM4.2

Mechanical Properties	Typical Values
Room Temperature	21°C
Humidity	62%

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Rubber ESD Floor Material (BFM)



General Specifications	Typical Values
Material	Synthetic rubber
Construction	Static dissipative top surface, black conductive bottom layer
Thickness	2.50mm
Colour	Dark grey or light grey fleck
Static dissipative top surface	$10^{(6)} - 10^{(9)}$
Black conductive bottom layer	$10^{(3)} - 10^{(6)}$
Heat resistance	Heat and solder resistant. Rubber material will not melt like other vinyl floor material.
Electrostatic dissipation time	<0.1s
Scratch resistance	No clear scratch
Resistance to ground	Less than $10^{(9)}$

Stud Position

SP1	SP2	SP3	SP4	SP5
SP6	SP7	SP8	SP9	SP10

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Premium Coil Cord (CCS)



Properties	Typical Values
Conductor	Diameter is 2.5mm with 7 tinsel wires
Insulation	Coil cord is insulated with PU material
Electrical Properties	The cord conductor shall have an end to end resistance not greater than 50 ohms
Resistivity	Current limiting resistance = 1 meg ohm + 20%
Breakaway Force	1 to 5lbs of pull away force is required to disconnect the snap in a normal disconnect direction
Ground Lead Extendibility	Cord should return back to at least 85% of its original length in less than 10 minutes after hanging for 24 hours, with 1KG weight on the other end
Plastic Parts	Anti-static nylon materials
Connection Integrity	The tensile strength of the end connections shall be not less than 66% of the tensile strength of the wire, and in no case shall it be less than 5 lbs
Hardware	All metal parts shall show no evidence of corrosion and rust after 24 hours submersion to salt solution. Preferably made from stainless steel or brass alloy plated with nickel
Markings	With logo and resistance value
Dimensions	Cord is available 6ft and 12ft (6ft standard)
Colour	Blue

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Straight Grounding Lead (SCJ)



Properties	Typical Values
Conductor	Diameter is 2.5mm, with 7 tinsel wires
Insulation	Straight cord is insulated with PU material
Electrical Properties	The cord conductor shall have an end to end resistance not greater than 50 ohms
Resistivity	Current limiting resistance = 1 meg ohm \pm 20%
Bending Life Test	Exceeds 20,000 cycles of bending life test without any physical damage on the strain relief
Breakaway Force	1 to 5 lbs. of pull away force is required to disconnect the snap in a normal disconnect direction
Connection Integrity	The tensile strength of the end connections shall be not less than 66% of the tensile strength of the wire, and in no case shall it be less than 5 lbs
Markings	With customer identification logo, resistance value, and date code
Colour	Standard is blue. Other colours available on request
Dimensions	Cord's length available upon request
Hardware	All metal parts shall show no evidence of corrosion and rust after 24 hours submersion to salt solution. Preferably made from stainless steel or brass alloy plated with nickel.
Plastic Parts	Made of static dissipative plastic material

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Premium Wrist-Strap (HCA10)



Properties	Typical Values
Band Construction	R-10 fabric band with elastic ratio of 1:2.5" to 1:3". Outer surface is non-conductive and inner surface of the strap shall be conductive, lined with conductive silver yarn
Interior Cuff Resistance	≤ 100 kilo ohms at 7 to 30 volts dc open circuit
Exterior Cuff Resistance	≥ 10 meg ohms at 7 to 30 volts dc open circuit
Wrist-Strap Life Test	When stretched to 200%, band returns to its normal length after 20,000 cycles
Breakaway Force	1 to 5 lbs. of pull away force is required to disconnect snap into normal direction
Termination	Fabric band assembled to GO2 buckle, non-curved and half-metal back, With flap and male snap available in sizes 4mm, 7mm and 10mm. The half-metal back is covered with anti-allergenic plastic buckle cap
Dimension	For free-sized wrist band, total length of exposed band shall not be less than 200.0mm. Or the flattened length must be 4 to 4.5 inches
Hardware	All metal parts shall show no evidence of corrosion and rust after 24 hours submersion to salt solution. Preferably made from stainless steel or brass alloy plated with nickel
Markings	With customer identification logo and date code
Plastic Parts	Made of static dissipative nylon material



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Earth Bonding Plug - UK, 1 x 10mm stud, no resistor (BP)

Earth Bonding Point (EBP) plugs are a simple method of grounding. They are designed to provide a common ground point for grounding using protective earth in an ESD protected area (EPA). UK plug. BP has a 1 x 10mm stud. No resistor.



Rigid ESD Awareness Sign (S315 / S630)

A simple yet effective way of reminding everyone of the problems and related procedures required to help eliminate ESD. Help workers stay informed of the static grounding policies at your facility with warning signs. These signs are designed for the attention of entering an ESD Protected Area. An essential sign for chemical storage and electrical areas. Warning signs are available in rigid or flexible material with self-adhesive backing. They are made from a PVC plastic board. The signs are printed in yellow and black as standard and feature the ESD cautionary symbol. These signs do not have any ESD properties and are therefore to be used outside of the EPA (EPA's entrance door, for example).

