

# THE MEMBRANE KEYBOARD COMPANY LTD | WHO WE ARE

Formed in 1995, The Membrane Keyboard Company continues to be one of the UK's leading manufacturers and suppliers of custom HMI products. With design and production taking place within our Fareham, UK, facility and coupled with approved offshore partners, we are perfectly placed to service projects of any size.



- Flexible PET & FPC Membrane Keypads
- Rigid PCB Membrane Keypads
- Silicone Rubber Keyboards & Keypads
- CapTouch
- ProxySense
- Graphic Overlays & Labels
- Catalogue & Customised Displays
- Electro Mechanical Assembly
- ISO9001:2015



## KEY MARKETS



MEDICAL



AUTOMOTIVE



AEROSPACE



SECURITY



ACCESS CONTROL



MILITARY



MARINE



CONTROL PANELS



INSTRUMENTATION



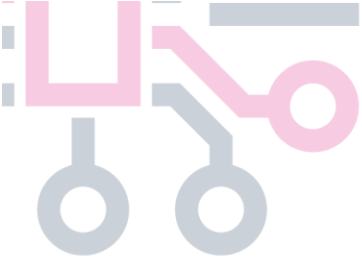
RAIL



POWER DISTRIBUTION

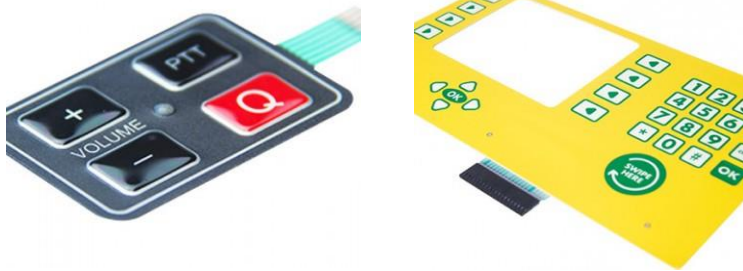


POINT OF SALE



# FLEXIBLE MEMBRANE KEYPADS

## PRODUCT DATA SHEET



Typical	Tactile	Non Tactile
Actuation Force (G)	350-450	50-500
Switch Life	1>3,000,000	3,000,000
Switch Contact	SPST Normally open	SPST Normally open
Contact Rating	30VDC 100MA 1 WATT	30VDC 100MA 1 WATT
Contact Bounce	<20 MS	<10MS
Contact Resistance	<100 OHMS	<100 OHMS
Capacitance	<20 PF	<20 PF
Operating Temp	-30C +60C	-30C +60C

Parameters will vary by design.

Our technical sales team will find the solution for your project requirements.

### KEY FEATURES

- Custom designed to your specification.
- Drawings and samples submitted for approval before volume manufacture.
- Application defined overlay, circuit and adhesive systems.
- Metal dome tactile, emboss tactile and non-tactile response.
- PET (Polyester) circuits for simple matrixes.
- FPC (Kapton) circuit for complex matrixes.
- Embedded components such as LEDs, sensors and resistors.
- Single point, selective or full backlighting illumination.
- Speciality inks and finishes such as clear or tinted windows, secret-til-lit, digital print.
- IP Rated.
- Bolt on services including backplates, housings, enclosures and electronic/mechanical assembly.

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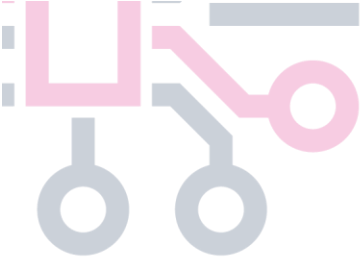
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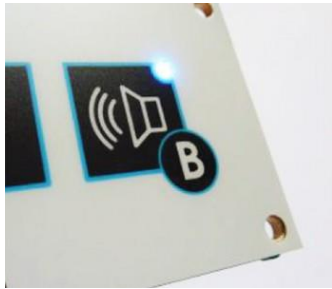


POINT OF SALE



# PCB MEMBRANE KEYPADS

## PRODUCT DATA SHEET



Typical	PCB Tactile	PCB Non Tactile
Actuation Force (G)	350-450	50-500
Switch Life	1-3,000,000	3,000,000
Switch Contact	SPST Normally open	SPST Normally open
Contact Rating	30VDC 100MA 1 WATT	30VDC 100MA 1 WATT
Contact Bounce	<20MS	<10MS
Contact Resistance	<100 OHMS	<100 OHMS
Capacitance	<20 PF	<20 PF
Operating Temp	-30C +60C	-30C +60C
Parameters will vary by design. Our technical sales team will find the solution for your project requirements.		

### KEY FEATURES

- Custom designed to your specification.
- Drawings and samples submitted for approval before volume manufacture.
- Application defined overlay, circuit and adhesive systems.
- Tactile, snap dome, hard, push or rotary switching.
- FR (rigid) PCB circuits.
- FPC (flexi) PCB circuits.
- Embedded/integrated components such as displays, LEDs, sensors and resistors.
- Single point, selective or full backlighting illumination.
- Speciality inks and finishes such as clear or tinted windows, secret-til-lit, digital print.
- IP Rated.
- Bolt on services including backplates, housings, enclosures and electronic/mechanical assembly.

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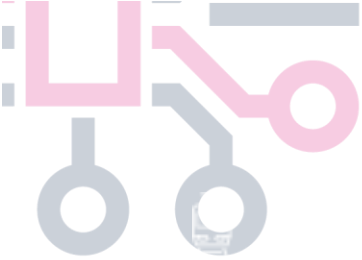
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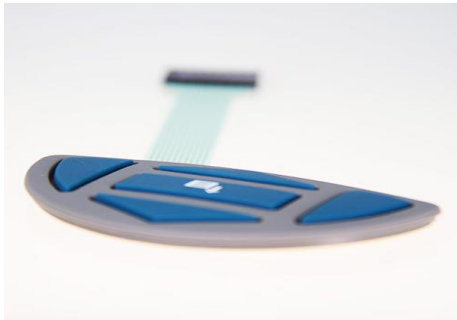


POINT OF SALE



# SILICONE RUBBER KEYMATS & KEYPADS

## PRODUCT DATA SHEET



### KEY FEATURES

- Custom designed to your specification.
- Drawings and samples submitted for approval before volume manufacture.
- Product specific shore hardness, key travel and operational force.
- Range of colours achieved by base material or paint.
- Embedded tactile response via Mylar, Rubber, metal domes or fitted dome array.
- Laser etched for key location in backlit applications.
- Screen printing.
- Plastic key tops to improve durability and life cycle.
- Epoxy cured key tops for resilience between user and key.
- Fitted Polyester Circuit (PET) or Flexible Printed Circuit (FPC).
- Membrane, PCB or Panel mounted.

SHORE HARDNESS	TENSILE STRENGTH KG/CM	ELONGATION	TEAR STRENGTH
35-80A	50-80	>100%	>9KG/CM2
OPERATING TEMPERATURE	OPERATING FORCE	LIFE CYCLE	CONTACT RESISTANCE
<20C>180C	40-350GRM	UP TO 10,000,000	<100 OHMS
CONTACT BOUNCE	CONTACT RATING	INSULATION RESISTANCE	Specification will differ according to design
<12 MILLISECONDS	<10MA@12VDC	10/20HMS@500VDC	

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## CAPTOUCH / PROXYSENSE HMI

From a single switch location to a keyboard of 16-20 keys or more, we use projected capacitive sensing for best reliability and repeatable detection.

Proximity function can operate at 20-40mm programmable distance.

Illuminated switches, icons and groups.

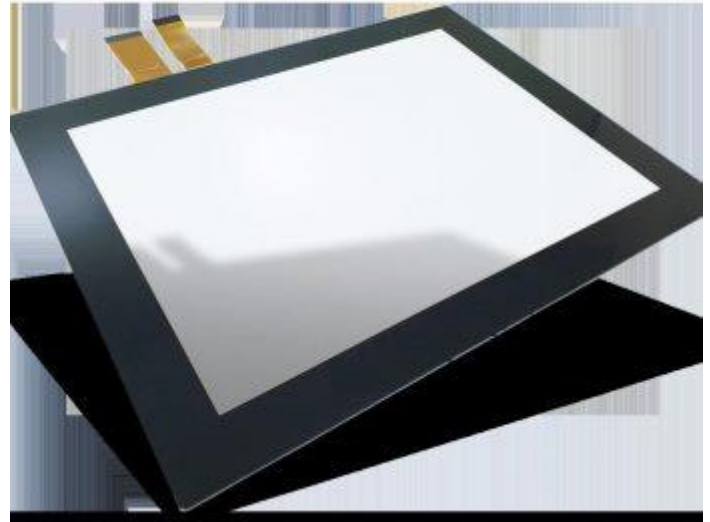
Individual or grouped proximity outputs.

Latching keys/toggle or momentary function.

Sliders or rotary wheel to give analogue function (sliders typ 50>75mm length).

Low supply current (uA) & low current indicators possible for battery powered systems panels.

Single master ON/OFF touchpad and ability to switch into a 'sleep'.



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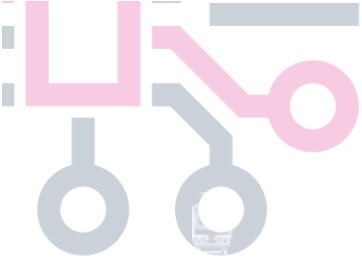
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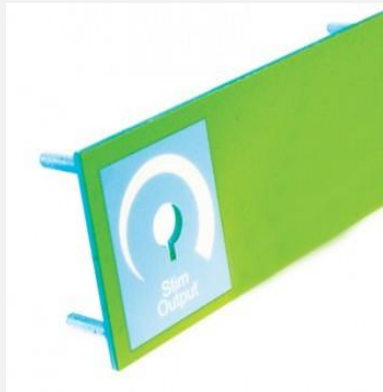
POINT OF SALE



# GRAPHIC OVERLAYS & LABELS

## Typical Characteristics:

- Customised.
- Application defined overlay, adhesive and material systems.
- Polyester graphic overlay with selective material finishes (fine, velvet, gloss, U.V. resistant, Soft Touch, Ingrained Stainless Steel effect, anti-microbial).
- Polycarbonate graphic overlay with selective material finishes (UL/FR resistant).
- Other overlay materials available (vinyl, etc.)
- Embossed features (braille, etc.).
- Colour matching (Pantone, RAL, etc.)
- Printed selective textures and finishes (clear windows, tinted windows, anti-glare, phosphorescent, secret-til-lit).
- Insert legends.
- Platen pressed or laser cut.



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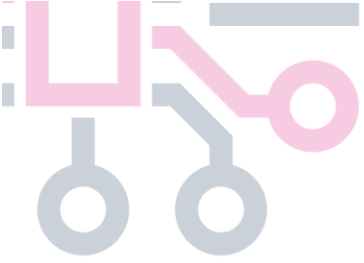
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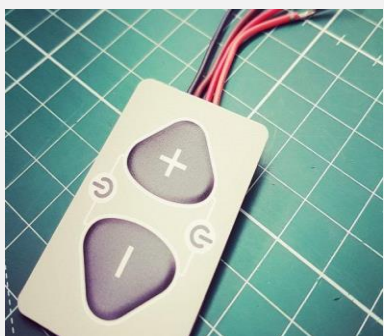
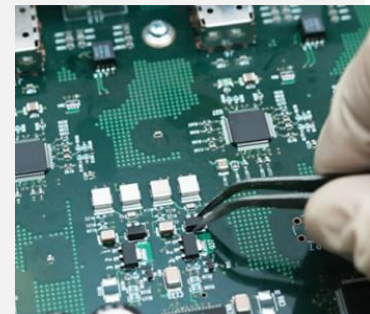
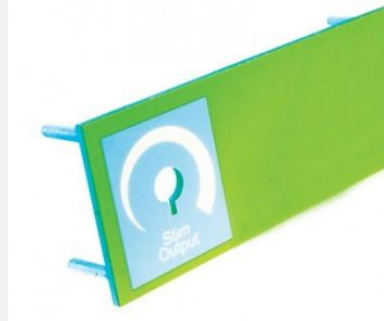
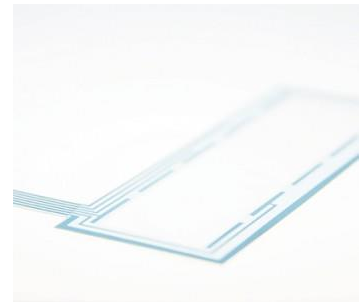
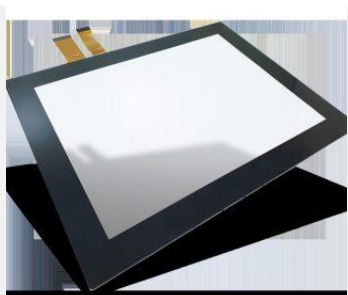
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www.membrane-keyboards.com



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 SECURITY	 ACCESS CONTROL	 MILITARY
 MARINE	 CONTROL PANELS	 INSTRUMENTATION
 RAIL	 POWER DISTRIBUTION	 POINT OF SALE



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