

Quote no. IQN
(Internal use only)



APEM

MEMBRANE SWITCH, OVERLAY OR LABEL ENQUIRY FORM

DATE:

SALES ENGINEER:

Company:

Contact(s):

Address:

Purchasing:

Post Code:

Telephone:

Eng:

Fax:

E-mail: Web:

PROJECT

Do you currently use Membrane Switches:

Is It: A new project?

A search for a second source?

Part no. or project name:

Application:

Target price: Competition:

QUANTITIES

Prototypes or preproduction: Production qtys:

Shipments per year: Annual production:

Duration of program: Qty to tool:

LEAD TIMES

Prototypes or Preproduction: Annual Production:

SPECIAL REQUIREMENTS

Storage temperature: Min: Max:

Operating temperature: Min: Max:

Environment:

Sealing: (IP etc.)

Shielding: Emi/Rfi ESD None

Chemical agents or solvents:

GRAPHICS

Graphic Material: Polycarbonate Polyester Bayfol Apem to determine

Finish: Gloss Matte/Satin Textured:

No. of graphic colours: Pantone RAL BS4800/381C To sample
(Including background colour)

Background colour:

Type of display window (specify quantities)

<input type="checkbox"/> LCD	<input type="checkbox"/> 7 Seg LED	<input type="checkbox"/> IR	<input type="checkbox"/> Secret-til-lit
<input type="checkbox"/> Clear LED	<input type="checkbox"/> Tinted LED		

Number of keys: 8.4mm Truetone metal dome tactile Non tactile
 12mm Truetone metal dome tactile Polymer dome tactile
 16mm Snaptron metal dome tactile
 20mm Truetone metal dome tactile
 Other Dome

Embossing:

Perimeter Pillow Other

MECHANICAL

Dimensions: L: W: Overall Thickness: Cutting tolerance:
(Standard +/- 0.25mm)

For through holes and non rectangular profiles, please supply drawing, or sketch details below.

CONSTRUCTION

Overlays

Overlay + adhesive



Overlay + adhesive + conductive pad



Embossed overlay + adhesive



Embossed overlay + adhesive + conductive pad



Flexible Membranes

Non tactile



Tactile



Polymer dome tactile
Dual circuit



Polymer dome tactile
Single Circuit



Rigid PCB based

Non tactile



Tactile



Custom constructions are available depending upon specific requirements.

ELECTRICAL SPECIFICATION

Switch layout: Common point (+) Matrix (x)

Apem to determine Prescribed layout

Contact circuit resistance (typ. 1 ohm/cm on 1mm track)

Integrated LEDs: Yes No Qty:

(std voltage 2.2V. Please specify colour and quantity - Current limit resistors not normally included)

LED layout: Common point (+) Matrix (x)

Apem to determine Prescribed layout

Circuit supply voltage:

EL backlight: Yes No Colour:..... Inverter required

Standard Specifications

Nominal operating voltage: 24V
 Maximum operating voltage: 50V
 Minimum operating voltage: 1V
 Nominal intensity: 30 mA
 Maximum switchable power: 500 mW
 Dielectric strength: 250 V rms
 Insulation resistance at 100V: > 100 Mohms
 Maximum contact bounce: < 5 ms

Compatible with TTL and CMOS circuits.

Tail and Connector

Total tail length:

(mm)

No. of contacts:

Pitch:

Type
(A,B or C)

(normally A)

A Female



B Male



C ZIF or LIF

Insulator Contacts

Base Material Stiffener

Pitch standards are 1mm and 1.25mm for ZIF and LIF connectors only

Nicomatic 2.54mm female connectors are fitted as standard unless otherwise stated.

Carbon protection: (usually on ZIF or LIF type tails only)
 (from oxidation)

Tail location:

Up

Down

Right

Left

From edge of membrane

Inboard from edge
Indent X =

Completely inboard



RIGID PCB PANELS

RoHS Compliant (Y or N)

PCB track finish:

Copper RoHS Tin (standard) Gold over Nickel

Gold flash

PCB thickness:

0.80mm 1.60mm 2.4mm 3.2mm Other

Solder masking: Yes No

Screen printed ident: Yes No

Connectors:

Type:..... Qty:..... No. of way:.....

Reference:..... Length (if cable):

Mounting:

PEM studs Qty:..... Type:.....

PEM Standoffs Qty:..... Type:.....

Mounting holes Qty:..... Diameter:.....

Other components (please supply B.O.M.)

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If shielding is required, please give the location and characteristics.

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Please advise nature of the support panel onto which flexible membranes will be mounted. Non rigid support can give rise to metal dome inversion.

If a support plate is required to be supplied as part of the keypad assembly please send drawing or sketch, specifying material and thickness.

REMARKS

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