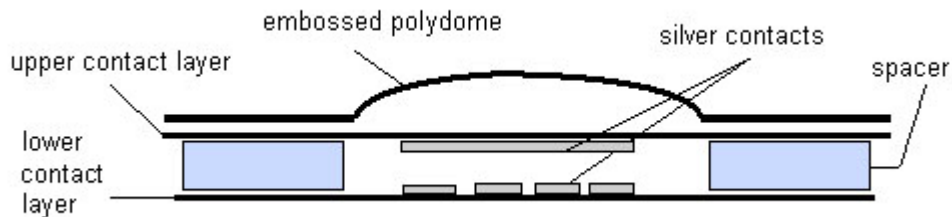


**Dome Array**

**Main Products: Polydomes (1)**

**Description:** Membrane package consisting of two single layer membranes, a spacer and an embossed polydome membrane (upper membrane). Instead of the lower membrane also a PCB can be used.

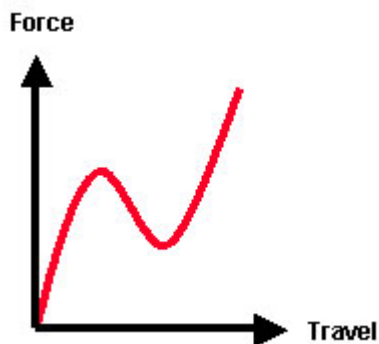
**Structure:**



A print into the polydome can replace the upper single layer membrane (Cost reduction).

**Main Products: Polydomes (2)**

**Data:**



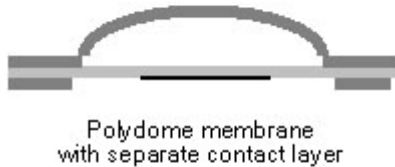
Non-linear Force-Travel Characteristic providing a precise tactile feedback

- Dome-Ø:** 4 to 12 mm
- Force:** 12 N (depending on diameter)
- Travel:** < 1.5 mm (depending on diameter)
- Lifetime:** Standard up to 1 million cycles Force reduction over lifetime ~25 %
- Bounce time:** < 5 ms

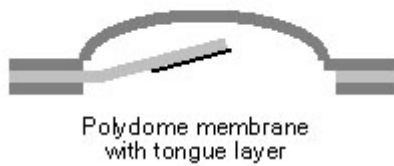
**Main Products: Polydomes (3) - General Assembly**



- Options
- one or both side adhesive Spacer
- printed Spacer
- welded Spacer membrane



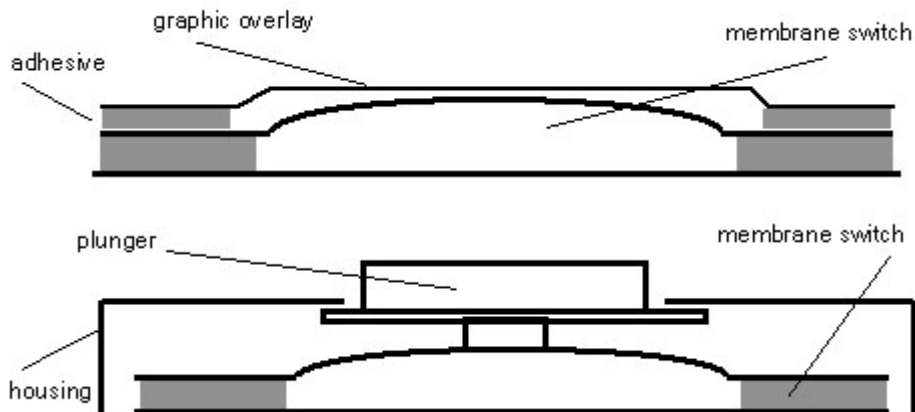
- Lower conductive layer
- printed polyester foil
- PI - flex
- PCB



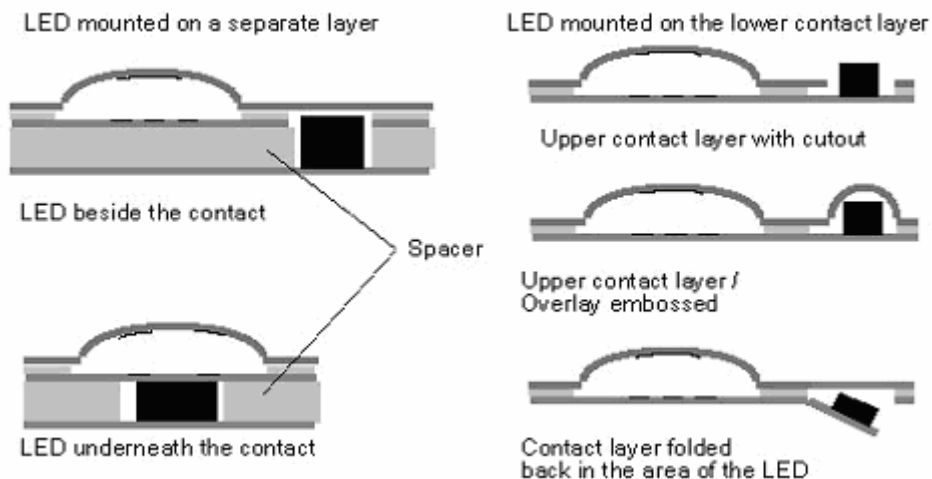
<1.5 mm (depending on diameter)

**Main Products: Polydomes (4)**

**-Direkt and Indirect actuated Membrane Switch**

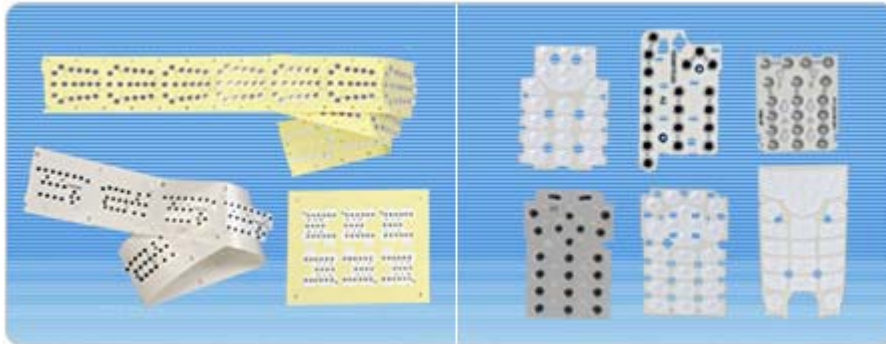


**Main Products: Polydomes (5) - Integration of LEDs**



**Metal dome Arrays**

**Main Products: Single Membrane Arrays (1)**



**Description:**

Screen printed polyester membrane (PET) Single- or double-sided (Through-hole) printed Number of prints: 12 max (standard: 4 to 6) Print thickness: about 10 microns Polyester thickness: 75 to 190 microns Inks: connection (Ag), passivation (C), protection (acryl), isolation (acryl)

**Structure:**

single membrane arrays are often part of membrane switches, polydome switches or the basic substrate of a smart membrane

**Data:**

Pitch: 0.5 mm  
 Print registration: +/- 0.2 mm (print to print)  
 (continued)

**Main Products: Single Membrane Arrays (2)**

<b>Data:</b>	Conductive inks:	25 - 50 mOhms/sq/10 µm
	Trace resistance:	Ink resistance x length / width / thickness
	Pitch:	0.5 mm
	Print registration: (continued)	+/-0.2 mm (print to print)
	Switching Current:	200 mA max Switching
	Power:	1 W Isolation
	resistance:	up to 1 GOhm
	Operating temperatur:	-25 to+85 Storage temperatur: -40 to+100
	Humidity:	5% to 93% RH (non-condensing)
	Thermal Shock:	-40 to +80 (500 Cycles)
	Flexion behaviour:	180°around a 2 mm diameter

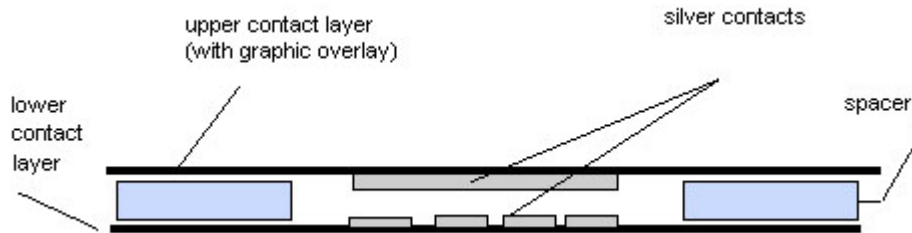
**Main Products: Multiple Membrane Arrays**

**Description:** Membrane package consisting of two or more single membrane arrays (e.g. lower and upper switch membrane) separated by a spacer

**Structure:**

**Data:**

No tactile effect:	Linear Force-Travel-Characteristic
Travel:	0,7 mm,
Force:	5 N
Lifetime:	1,000,000 cycles



**Dome Array Spec.**

Name		METAL DOME ARRAY
DOMES		
DOME DIAMETER (mm)	5 , 6 , 7 , 8 , 9 , 10 , 12 ....	3.5 , 4 , 5 , 6 , 8 , 10 , 12....
FORCE	2....12N ± 20%	1.5...5N ± 15%
TRAVEL	0.4....1.0 mm ± 25%	0.15....0.65 mm ± 20%
OPERATION TEMP.	- 40 ....+ 85	- 40 ....+ 105
Dome Location Compared to Positioning Holes	+/- 0.25mm	+/- 0.25mm
OPTIONS	a. Adhesive on front or back. b. Printed spacer or welded spacer. c. White dome layer for better illumination. d. Printed ESD/EMI silver grid.	

**Dome Array Spec.**

