

Membrane Switch, in simple terms, is a momentary switching device in which at least one contact is on or made of, a flexible substrate.

Membrane structure



H The features of a membrane switch:

- 1) **Direct (Ohmic) Contact:** the poles of the switch must make physical contact, i.e. can not be non-contact type like capacitive, ferrite core, or hall effect.
- 2) **Momentary Action:** Upon release, the poles immediately separate as the flexing membrane returns to its original position.
- 3) Low Voltage Application: A membrane switch is designed to be used in low voltage, DC logic-level-signal, applications.
- 4) **Membrane Layer:** A *thin pliable layer* and carries one pole, both poles or that flexes during switch operation used to short both switch poles together.
- 5) Static Layer: Does not flex during switch operation but carries one pole, both poles or used to short both switch poles together. Leadsintec designs and manufactures a complete line of custom membrane switches. Like all our products, we produce membrane switches with the functional and graphics options required for demanding markets and applications. With our wide variety of design options, you can tailor your switch for your unique applications.

H Electrical Characteristics

Contact Resistance:	100 ohms maximum typical
Open Circuit Resistanc :	5 x 10 ⁶ ohms minimum
Contact Rating:	30 VDC maximum, 100 mA maximum,
	1 watt maximum

Physical Characteristics

Life Cycles:	2 million minimum non-tactile
	1 million minimum tactile (Poly Dome)
Operating Force:	2 to 6 oz. typical non-tactile
	10 to 18 oz. typical tactile
Overall Thickness:	028" typical non-tactile
	026" typical tactile

Environmental Characteristics

Operating/Storage:	40 to +65 standard
Temp:	-40 to +85 available
Thermal Shock:	no effect after 100 cycles from -40 to +65°C
Humiditu	no effect after exposure to 95% RH at 40°C
Turnicity.	for 504 hours (non-tactile)

Products show





