



- The object of Electrostatic Discharge (ESD) protection is dissipating high voltage spikes introduced through operator contact. The operating environment of the switch assembly and the sensitivity of the mating electronics are the most important factors affecting ESD shield design.
- Protection from Radio Frequency Interference (RFI) and Electromagnetic Interference (EMI) requires a comprehensive review of the entire unit, as the membrane switch is only a part of the overall shielding plan. A reliable ground is important for proper shield termination, and unnecessary cutouts or display windows should be avoided.

#### Applications

- Medical Equipment
- Industrial Process Controllers
- Computer Peripherals
- Military Applications

#### Specifications \*

- PCB Assemblies
- Adhesives
- PTF Resistors
- Surface Mount

\*Specifications shown above are typical. Custom configurations are available.



## Shielding for Membrane Switches

Shielding requirements for membrane switches vary according to application; for this reason, a variety of methods are used in these products, including:

- Passive protection (ESD)
- Conductive PTF grid
- Conductive PTF mask
- Metal or metallized foil lamination
- Wire fabric wrap
- ITO & ATO

Formulating a successful shielding plan requires careful attention to detail, as there are many variables to consider, including:

- Operating environment of the unit
- Availability of a suitable ground
- Quantity and size of cutouts or display windows
- Presence of high frequency AC sources such as electroluminescent (EL) lamps