



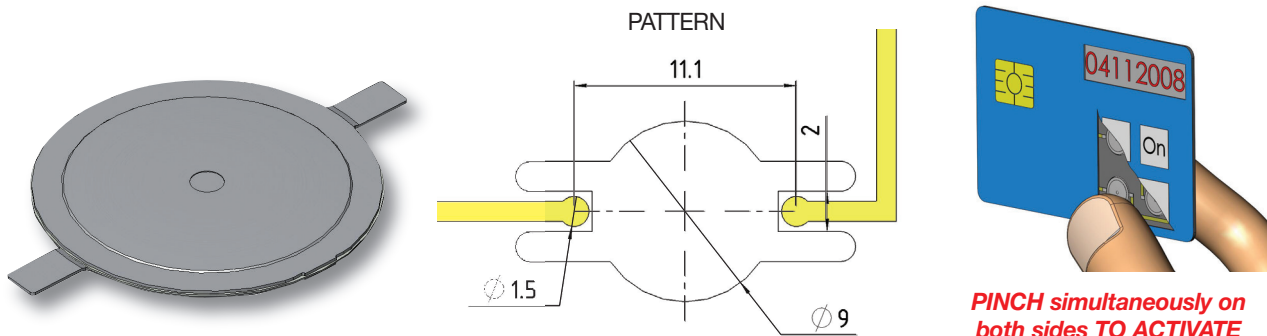
P-Switch® for smart cards

**Innovation
Contact us!**

Thanks to its long established knowledge in the metal dome switching technology, NICOMATIC has developed and patented the Pinching Switch - P-Switch® - solution for the Smart Card Business & Industry. The P-Switch® is designed to fit ultra-thin environment size requirements and adapt to fully automated Pick & Place systems. It is suitable to all card assembling processes with built-in electronics.

CONCEPT

The P-Switch® button must be pressed simultaneously on both sides. Its use provides an accurate and effective tactile feeling. It also insures the electrical signal integrity and offers a very long life expectancy. The overall P-Switch® thickness meets the Card market Standards thanks to a slight acceptable preloading at the lamination step of the process.



MARKETS

The P-Switch® is mainly dedicated to Smart Cards with built-in electronics: power source, chip, display, flex circuits or PCB, single or several buttons keypads. It can also apply to Contactless Cards with security high level requirements.

- One-Time Password (OTP) Identification
- RFID
- Secure Access : ID / Financial Transactions
- Data Storage / Tracking
- Other applications: Medical & Lab.equipment, intelligent textiles...

ADVANTAGES

- Outstanding tactile feeling
- Fit to various sizes & thicknesses (preloading)
- Activation force stable and homogeneous per delivery batch
- Durable & Reliable (extra-long life expectancy)
- 100 % mechanical & dimensional features controlled
- 100% traceability per batch number

TECHNICAL FEATURES

The following values are given for the P-Switch® device itself; some of them could slightly evolve once built-in to your application. Please feel free to contact us !

- Material : Ni-plated or Ni-plated + selective Au on solder tabs and contact area if required
- Size : dia. 8,5mm
- Overall thickness : 0,5 ± 0,05mm
- Acceptable pre-loading : 0,10mm
- Pinch stroke : 0,34mm
- Overstroke : 0,1mm max.
- Actuation force : 1,9N (190g) ± 0,3N (30g)
- Rebound force : 0,35 N (35g) ± 0,2N (20g)
- Life expectancy : 5 Million actuations
- Rated voltage : up to 100V
- Rated current : up to 1A
- Contact resistance : < 300 mΩ
- Dielectric breakdown voltage : 350V
- Switching capacity at rated current : up to 80W
- Temperature range: -40°C to 110°C
- SMT process compliant
- Packaging: in Tape and Reel

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