

Touch Control Technology (TCT)

DESCRIPTION

- · A patented, robust, solid-state-based touch control technology
- Operates on the principle of signal detection through capacitive or resistive coupling (human touch) of known generated input pulses

APPLICATIONS

- · Household Appliance Controls
- Commercial and Building Equipment
- Computer and Peripherals
- Factory Automation and Control Systems
- **Environmental Control Interface Equipment**
- **Industrial Process Controls**
- Kiosks and Point-of-Sale Interface
- Measuring Equipment
- Medical Equipment

KEY FEATURES

- Touch Control Technology (solid state)
- Touch surface can be any dielectric material including glass, plastic, polycarbonate, marble, and wood
- Suitable for harsh environments
- Custom graphics can be printed directly on touch surfaces or on an overlay
- Options include backlight, lighted keys
- Tactile response is available
- Adjustable key sensitivity permits use with or without gloves



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- requirements
- Panel thickness up to 0.95 in. [24 mm] depending on material and sensitivity
- Compatible with contoured (non-flat) switching panels
- Fully adaptable to any controller; no proprietary interface required
- Easily integrated into existing control switch applications
- Matrix outputs for seamless replacement and integration into membrane applications

ELECTRICAL

- Response Time: < 40 ms (for less than 15 keys)
- Switch Cycling (electrical): 5,000,000 cycles minimum
- · Low power 8-bit microcontroller
- Binary, serial and matrix output communication available
- Key sensitivity highly adjustable
- Matrix kev scanning
- Multiple key suppression

MECHANICAL

- Operating Temperature: -40° to 185°F [-40° to 85°C] (221°F [105°C] for short duration)
- Sealability: IEC 60529, IP67 (where applicable)
- · Touch keys through any dielectric

FOR MORE INFORMATION

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STANDARDS & SPECS

· Micro controllers

Product Specification 108-47010

Application Specification 114-47010

PRODUCT OFFERING

- Keypads in various customer–defined configurations.
 Graphic Overlay manufactured from glass or other dielectric material per customer requirements.
- Discrete Electronic Components: Micro controller depending on the number of required keys, configuration, and ergonomics of the application.

| Component | Max. # Keys | Part Number |
|-------------|-------------|-------------|
| | 10 | 1710094-1* |
| TCT | 15 | 1710084-1 |
| Micro | 22 | 1710098-1* |
| Controllers | 36 | 1710095-1* |
| | 56 | 1710085-1 |

| Component | Features | Part Number |
|----------------------------|------------|-------------|
| TCT Micro Controller | Slider Key | 1710091-1* |

^{*} Call Tyco Electronics for availability

 Vertical integration is made possible through TCT together with Tyco Electronics' leading edge design and manufacturing capability in PCB's, connectors, cable assemblies and power switching components including relays, contactor, transformer, and circuit breakers.

Main Keypad Elements





