7036, 7036-D 7037, 7037-D

40-Channel Isolated Switch Cards 30-Channel Digital I/O Cards



The Model 7036, 7036-D, 7037, and 7037-D single-pole relay switching cards are well-suited for configuring automated test systems for portable devices. The Model 7036 and 7036-D offer 40 independent channels of 1-pole Form A switching, while the Model 7037 and 7037-D provide 30 channels, plus ten independent digital inputs and ten independent digital outputs for control applications. The 7036 and 7037 provide a 96-pin mass terminated connector. The 7036-D and 7037-D have two heavy duty 50-pin D-sub connectors at the ends of short cables. The D-sub connector version is designed for industrial/production applications where repeated connects/ disconnects with external cables are required. The 7037-DT is an extra connector board for the 7036-D and 7037-D cards that can be used to upgrade a standard 7036-D to 7036 or 7037-D to 7037.

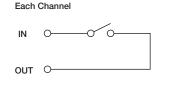
- Mass terminated connection
- 1A switch rating
- <100pA offset current
- <4µV contact potential

Ordering Information

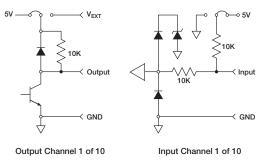
7036 Single-Pole Relay Card 7036-D Single-Pole Relay Card with D-Sub Connectors 7037 Single-Pole Relay Digital I/O Card 7037-D Single-Pole Relay Digital

I/O Card with D-Sub Connectors

Relay switch configuration for Models 7036, 7036-D, 7037, and 7037-D



Digital I/O configuration for Models 7037 and 7037-D



1.888.KEITHLEY (U.S. only)

www.keithley.com

MODEL 7036 and 7036-D SPECIFICATIONS

RELAY SWITCH SPECIFICATIONS

RELAY SWITCH CONFIGURATION: 40 independent channels of 1-pole switching.

CONTACT CONFIGURATION: 1 pole Form A.

- CONNECTOR TYPE: 7036: 96-pin male DIN card connector. 7036-D: Cables with 50-pin male and female D-sub connectors.
- MAXIMUM SIGNAL LEVEL: 60V DC, 30V rms, 42V peak betwen any two inputs or chassis, 1A switched. 30VA (resistive load).
- CONTACT LIFE: Cold Switching: 108 closures. At Maximum Signal Levels: 10⁵ closures.
- CHANNEL RESISTANCE (per conductor): $<1\Omega$.
- **CONTACT POTENTIAL:** $<4\mu$ V per contact.
- OFFSET CURRENT: <100pA.
- **ACTUATION TIME: 3ms**
- ISOLATION: Channel to Channel: 7036: >109Q, <25pF. 7036-D: >10⁹Ω, <60pF. Common Mode: >10⁹Ω, <100pF.
- CROSSTALK (1MHz, 50Ω Load): 7036: <-40dB. 7036-D: <-30dB
- INSERTION LOSS (50Ω Source, 50Ω Load): <0.3dB below 1MHz, <3dB below 10MHz.

RELAY DRIVE CURRENT (per relay): 16mA.

7036/7036-D/7037/7037-D GENERAL

- EMC: Conforms to European Union Directive 89/336/EEC. SAFETY: Conforms to European Union Directive 73/23/EEC (meets EN61010-1/IEC 1010).
- ENVIRONMENT: Operating: 0° to 50°C, up to 35°C <80% RH. Storage: -25° to 65°C.

7011-KIT-R	96-Pin Female Connector Kit (included)
7011-MTR	96-Pin Male Bulkhead Mount Connector
7036-MTC-2	Mass Terminated Cable Assembly
7036-DT	Extra Connector Board for the 7036-D Card
7037-DT	Extra Connector Board for the 7037-D Card

MODEL 7037 AND 7037-D SPECIFICATIONS

RELAY SWITCH SPECIFICATIONS

- **RELAY SWITCH CONFIGURATION: 30 independent channels of** 1-pole switching
- CONTACT CONFIGURATION: 1 pole Form A.
- CONNECTOR TYPE: 7037: 96-pin male DIN card connector. 7037-D: Cables with 50-pin male and female D-sub connectors.
- MAXIMUM SIGNAL: 110V DC, 110V rms, 155V peak between any two inputs or chassis, 1A switched, 30VA (resistive load).
- CONTACT LIFE: Cold Switching: 108 closures. At Maximum Signal Levels: 105 closures.
- CHANNEL RESISTANCE (per conductor): <1.25Ω.
- **CONTACT POTENTIAL:** $<4\mu$ V per contact.
- OFFSET CURRENT: <100pA.
- **ACTUATION TIME: 3ms**
- ISOLATION: Channel to Channel: >109Ω, <25pF. Common Mode: >10 $^{9}\Omega$, <100pF.
- CROSSTALK (1MHz, 50Ω Load): <-40dB
- INSERTION LOSS (50Ω Source, 50Ω Load): <0.25dB below 1MHz, <3dB below 10MHz.
- RELAY DRIVE CURRENT (per relay): 16mA.

DIGITAL I/O SPECIFICATIONS

- DIGITAL I/O CAPABILITY: 10 independent inputs. 10 independent outputs.
- OUTPUT:
 - Configuration: 10 open-collector drivers with factory installed $10k\Omega$ pull-up resistors. Each driver has an internal flyback diode
 - Pull-Up Voltage: 5V internally supplied, external connection provided for user-supplied voltage up to 42V max. Outputs short circuit protected up to 25V
- Maximum Sink Current: Per Channel: 250mA. Per Card: 1A.
- Logic: Hardware user configurable for negative or positive true logic levels.

INPUT:

Configuration: 10 inputs with internal $10k\Omega$ pull-up resistors provided. Input resistors can be set for pull-up or pull-down configuration.

MAXIMUM VOLTAGE LEVEL: 42V peak.

LOGIC: Positive true.

