

# 7036 7037-D



## 40-Channel Isolated Switch Card 30-Channel Digital I/O Card

The Model 7036 and 7037-D single-pole relay switching cards are well-suited for configuring automated test systems for portable devices. The Model 7036 offers 40 independent channels of 1-pole Form A switching, while the Model 7037-D provides 30 channels, plus ten independent digital inputs and ten independent digital outputs for control applications. The 7036 provides a 96-pin mass terminated connector. The 7037-D has 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 7037-D card that can be used to upgrade a standard 7037-D to a mass terminated connector.

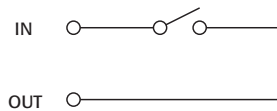
- Mass terminated connection
- 1A switch rating
- <100pA offset current
- <4 $\mu$ V contact potential

### Ordering Information

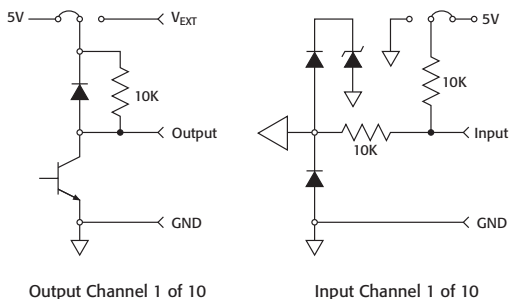
- 7036** Single-Pole Relay Card  
**7037-D** Single-Pole Relay Digital I/O Card with D-Sub Connectors

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

Each Channel



#### Digital I/O configuration for Model 7037-D



### MODEL 7036 SPECIFICATIONS

#### RELAY SWITCH SPECIFICATIONS

**RELAY SWITCH CONFIGURATION:** 40 independent channels of 1-pole switching.  
**CONTACT CONFIGURATION:** 1 pole Form A.  
**CONNECTOR TYPE:** 96-pin male DIN card connector.  
**MAXIMUM SIGNAL LEVEL:** 60V DC, 30V rms, 42V peak between any two inputs or chassis, 1A switched, 30VA (resistive load).  
**CONTACT LIFE: Cold Switching:** 10<sup>8</sup> closures.  
 At Maximum Signal Levels: 10<sup>5</sup> closures.  
**CHANNEL RESISTANCE (per conductor):** <1 $\Omega$ .  
**CONTACT POTENTIAL:** <4 $\mu$ V per contact.  
**OFFSET CURRENT:** <100pA.  
**ACTUATION TIME:** 3ms.  
**ISOLATION: Channel to Channel:** >10<sup>9</sup> $\Omega$ , <25pF.  
**Common Mode:** >10<sup>9</sup> $\Omega$ , <100pF.  
**CROSSTALK (1MHz, 50 $\Omega$  Load):** 7036: <-40dB.  
 7036-D: <-30dB.  
**INSERTION LOSS (50 $\Omega$  Source, 50 $\Omega$  Load):** <0.3dB below 1MHz, <3dB below 10MHz.  
**RELAY DRIVE CURRENT (per relay):** 16mA.

### 7036/7037-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.

### ACCESSORIES AVAILABLE

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

### MODEL 7037-D SPECIFICATIONS

#### RELAY SWITCH SPECIFICATIONS

**RELAY SWITCH CONFIGURATION:** 30 independent channels of 1-pole switching.  
**CONTACT CONFIGURATION:** 1 pole Form A.  
**CONNECTOR TYPE:** 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:** 10<sup>8</sup> closures.  
 At Maximum Signal Levels: 10<sup>5</sup> closures.  
**CHANNEL RESISTANCE (per conductor):** <1.25 $\Omega$ .  
**CONTACT POTENTIAL:** <4 $\mu$ V per contact.  
**OFFSET CURRENT:** <100pA.  
**ACTUATION TIME:** 3ms.  
**ISOLATION: Channel to Channel:** >10<sup>9</sup> $\Omega$ , <25pF.  
**Common Mode:** >10<sup>9</sup> $\Omega$ , <100pF.  
**CROSSTALK (1MHz, 50 $\Omega$  Load):** <-40dB.  
**INSERTION LOSS (50 $\Omega$  Source, 50 $\Omega$  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.

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