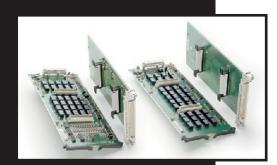
# 7036 7037-D

# 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</li>
- <4µV contact potential</li>

## **Ordering Information**

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

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

Each Channel

IN O O

#### 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 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: >10 $^{9}\Omega$ , <25pF. Common Mode: >10 $^{9}\Omega$ , <100pF.

CROSSTALK (1MHz,  $50\Omega$  Load) <-40dB.

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/

**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.

#### **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 $^{9}\Omega$ , <25pF. **Common Mode:** >10 $^{9}\Omega$ , <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:

**Logic:** Hardware user configurable for negative or positive true logic levels.

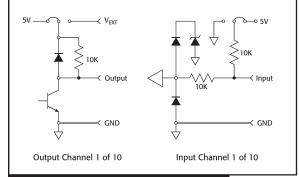
INPUT:

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.

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



#### 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

037-DT Extra Connector Board for the

7037-D Card

#### **SERVICES AVAILABLE**

6-3Y-EW 1-year factory warranty

extended to 3 years from date of shipment

7037-D-3Y-EW 1-year factory warranty

extended to 3 years from date of shipment

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