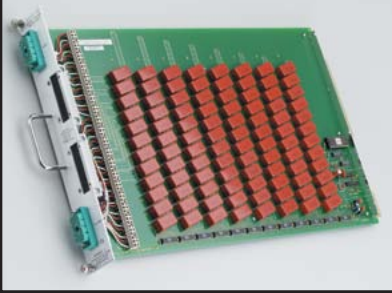


## 7071



- 96 three-pole, Form A relay crosspoints
- High, Low, and Guard switched
- $<5\mu\text{V}$  contact potential per crosspoint
- Signals to 200V and 1A
- Compatible with Models 707A and 708B

## Ordering Information

7071 8×12 General Purpose Matrix Card

# General Purpose Matrix Card

## 8×12

The Model 7071 General Purpose Matrix Card is an 8×12 configuration that switches High, Low, and Guard at each of the 96 relay crosspoints. The eight rows are connected automatically to the general purpose analog backplane when the matrix card is installed into the 707A and 708A mainframe. This allows for easy expansion in 12 column increments and eliminates the requirement for wiring between cards.

The matrix card will handle voltages up to 200V and currents up to 0.5A switched or 1A unswitched. A  $5\mu\text{V}$  contact potential assures that the switch does not adversely affect low voltage sensitivity. The 3dB signal bandwidth is 5MHz. Guard inputs improve isolation between signals and assure  $<100\text{pA}$  offset currents into any electrical path.

## ACCESSORIES AVAILABLE

7078-CIT	Contact Insertion and Extraction Tools
7078-HCT	Hand Crimping Tool
7078-KIT	Connector Kit
7078-MTC-5	Mass Terminated Cable Assembly, 1.5m (5 ft)
7078-MTC-20	Mass Terminated Cable Assembly, 6m (20 ft)
7078-MTR	Bulkhead Mount Receptacle with Contacts

## SERVICES AVAILABLE

7071-3Y-EW	1-year factory warranty extended to 3 years from date of shipment
------------	---

**MATRIX CONFIGURATION:** 8 rows by 12 columns.

**CROSSPOINT CONFIGURATION:** 3-pole Form A (HI, LO, GUARD).

**CONNECTOR TYPE:** Quick disconnect using 38-pin connectors or screw terminals.

**MAXIMUM SIGNAL LEVEL:** 200V, 1A carry/0.5A switched, 10VA peak (resistive load).

**COMMON MODE VOLTAGE:** 200V maximum between any 2 pins or chassis.

**CONTACT LIFE: Cold Switching:**  $10^8$  closures.  
At Maximum Signal Level:  $10^5$  closures.

**PATH RESISTANCE (per conductor):**  $<0.6\Omega$  initial,  $<1.5\Omega$  at end of contact life.

**CONTACT POTENTIAL:**  $<5\mu\text{V}$  per crosspoint (HI to LO  $<1$  minute after actuation).

**OFFSET CURRENT:**  $<100\text{pA}$ .

**ISOLATION: Path:**  $>10^{10}\Omega$ ,  $<10\text{pF}$ . **Differential:**  $10^9\Omega$ ,  $45\text{pF}$  nominal. **Common Mode:**  $10^9\Omega$ ,  $165\text{pF}$  nominal.

**CROSSTALK:**  $<-50\text{dB}$  at 1MHz,  $50\Omega$  load.

**INSERTION LOSS (1MHz,  $50\Omega$  source,  $50\Omega$  load):** 0.1dB typical.

**3dB BANDWIDTH ( $50\Omega$  load):** 5MHz typical.

**RELAY SETTLING TIME:**  $<3\text{ms}$ .

**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:**  $0^\circ$  to  $50^\circ\text{C}$ , up to  $35^\circ\text{C}$  at 70% R.H.  
**Storage:**  $-25$  to  $+65^\circ\text{C}$ .

