

# 7072 8×12 Semiconductor Matrix Card

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

**CONNECTOR TYPE:** 3-lug triaxial (Signal, Guard, Chassis).

**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<sup>7</sup> closures. **At Maximum Signal Level:** 10<sup>5</sup> closures.

**PATH RESISTANCE (per conductor):** <1Ω initial, <3.5Ω at end of contact life.

**CONTACT POTENTIAL:** <40μV per crosspoint (Signal to Guard).

**RELAY SETTLING TIME:** <15ms.

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

**EMC:** Conforms to European Union Directive 89/336/EEC.

**SAFETY:** Conforms to European Union Directive 73/23/EEC (meets EN61010-1/IEC 1010).

**ENVIRONMENT:**

**OFFSET CURRENT and PATH ISOLATION Specifications:** 23°C, <60% R.H.  
**Operating:** 0° to 50°C, up to 35°C at 70% R.H.

**Storage:** -25° to +65°C.

**ACCESSORIES SUPPLIED:** Instruction manual and four SMB expansion cables (C54-1).

**ACCESSORIES AVAILABLE:**

- 7078-TRX-BNC: 3-Lug Triax to BNC Adapter
- 7078-TRX-T: 3-Lug Triax Tee Adapter
- 7078-TRX-3: 3-Lug Triax Cable, 0.9m (3 ft)
- 7078-TRX-10: 3-Lug Triax Cable, 3m (10 ft)
- 7078-TBC: 3-Lug Female Triax Bulk head Connector with Cap
- 7078-CSHP: Cable Set to connect 7072 to HP 4145

	LOW-CURRENT (ROWS A - B)	GENERAL-PURPOSE (ROWS C - F)	C-V (ROWS G - H)
<b>CROSSPOINT CONFIGURATION:</b>	2-pole Form A	2-pole Form A	1-pole Form A, Common Guard
<b>OFFSET CURRENT:</b>	a<1 pA	<20 pA	<20 pA
<b>PATH ISOLATION:</b>			
<b>Resistance:</b>	>10 <sup>13</sup> Ω	>10 <sup>12</sup> Ω	>10 <sup>12</sup> Ω
<b>Capacitance (nominal):</b>	0.4 pF	1 pF	0.6 pF
<b>CROSSTALK</b>			
<b>1 MHz, 50Ω load (typical):</b>	<-50 dB	<-40 dB	<-50 dB
<b>3dB BANDWIDTH (typical), 50Ω Load:</b>	15 MHz	8 MHz	5 MHz
<b>RELAY DRIVE CURRENT (per crosspoint):</b>	40 mA	60 mA	80 mA

