

7172 8×12 Low Current Matrix Card

MATRIX CONFIGURATION: Single 8 rows × 12 columns. Expanding the columns can be done internally by connecting the rows of multiple 7172 cards together with coax jumpers.

OFFSET CURRENT SELF TEST: An onboard electrometer circuit measures offset current when the rear panel switch is pushed. Pass/fail LEDs indicate if offset is above or below 500fA. The onboard SMB connector outputs voltage proportional to current (1mV/10fA).

CROSSPOINT CONFIGURATION: 2-pole Form A (Signal, Guard).

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

MAXIMUM SIGNAL LEVEL: Pin to pin or pin to chassis: 200V, 1A carry/0.5A switched, 10VA.

CONTACT LIFE: Cold Switching: 10⁸ closures. At Maximum Signal Level: 10⁵ closures.

PATH RESISTANCE (Per Conductor): <1.0Ω initial, <1.5Ω at end of contact life.

CONTACT POTENTIAL: Differential (Signal to Guard): <30μV.

Single ended (Guard to Guard or Signal to Signal): <60μV.

OFFSET CURRENT: <500fA, 150fA typical.

ISOLATION:

Path (Signal to Signal): >10¹³Ω, 0.4pF typical.

Differential (Signal to Guard): >10⁹Ω, 170pF typical.

Common (Signal and Guard to Chassis): >10⁹Ω, 430pF typical.

CROSSTALK (1MHz, 50Ω Load): <-70dB.

INSERTION LOSS (1MHz, 50Ω Load): 0.22dB typical.

3dB BANDWIDTH (50Ω Load, 50Ω Source): 30MHz typical.

RELAY DRIVE CURRENT (Per Crosspoint): 30mA.

RELAY SETTling TIME: <2ms.

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, <50% R.H.

Operating: 0° to 50°C, up to 35°C at 70% R.H.

Storage: -25° to +65°C.

ACCESSORY SUPPLIED: Instruction manual.

Specifications are subject to change without notice.

