

# 7999-6 GPIB RF Relay Unit

## Relay Specifications

### CONNECTOR TYPE:

**Input:** Female SMA connector (on relay).  
**Output:** N-type.

**CONTACT LIFE:**  $5 \times 10^6$  cycles minimum;  $10 \times 10^6$  typical.

**ACTUATION TIME:** 15ms.

**FREQUENCY RANGE:** DC to 4GHz. Relay paths are  $50\Omega$  terminated when open.

**INSERTION LOSS:**  $0.3\text{dB} + 0.115 \times \text{frequency (in GHz)}$ .

**ISOLATION:** 100dB minimum; 130dB typical.

**SWR:** 1.2 maximum.

### GENERAL

**INTERFACE:** GPIB (IEEE-488.2) and SCPI.

**INDICATORS:** Power, relay position status and error LED.

**CONTACT CLOSURE COUNTERS:** One counter per relay path, up to 10 million counts each, maintained in non-volatile memory.

**MAXIMUM COMMON MODE:** 42V peak, any terminal to earth.

**MAXIMUM SWITCHING SIGNAL:** 1W CW, CAT I.

**POWER:** User-supplied 24VDC (22VDC min., 30VDC max.), 1.8A max.

**ENVIRONMENT: Operating:**  $0^\circ$  to  $40^\circ\text{C}$ , up to  $35^\circ\text{C}$  <80% RH.

**Storage:**  $-25^\circ$  to  $65^\circ\text{C}$ .

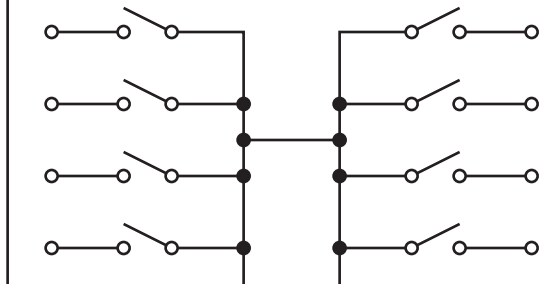
**EMC:** Conforms with European Union Directive 89/336/EEC.

**SAFETY:** Conforms with European Union Directive 73/23/EEC.

**DIMENSIONS:** 429mm long  $\times$  133mm wide  $\times$  161mm deep (19.00"  $\times$  5.25"  $\times$  6.34").

**ACCESSORIES SUPPLIED:** Instruction manual.

### Simplified Schematic



Specifications are subject to change without notice.