# 7703 32-Channel High Speed Differential Multiplexer

### **GENERAL**

**32 CHANNELS:** 32 channels of 2-pole relay input. All channels configurable to 4-pole.

RELAY TYPE: Reed.
ACTUATION TIME: <1ms.

### **CAPABILITIES**

CHANNELS 1-32: Multiplex one of 32 2-pole or one of 16 4-pole signals into DMM.

### **INPUTS**

# MAXIMUM SIGNAL LEVEL:

Channels (1-32): 300V DC or rms, 0.5A switched, 10W maximum.

Contact Life (typ): >5×104 operations at max signal level.

>108 operations cold switching.

**CONTACT RESISTANCE:**  $<1\Omega$  at end of contact life.

**CONTACT POTENTIAL:** <±3μV typical per contact, 6μV max.

<±3μV typical per contact pair, 6μV max.

OFFSET CURRENT: <100pA.

**CONNECTOR TYPE:** 50 pin D-sub  $\times$  2.

RELAY DRIVE CURRENT: 20mA per channel.

**ISOLATION BETWEEN ANY TWO TERMINALS:**  $>10^{9}\Omega$ , <200pF.

ISOLATION BETWEEN ANY TERMINAL AND EARTH:  $>10^{9}\Omega$ , <400pE

CROSS TALK (1 MHz,  $50\Omega$  Load): <-40dB.

INSERTION LOSS (50 $\Omega$  Source, 50 $\Omega$  Load): <0.35dB below 1MHz.

<3dB below 2MHz.

COMMON MODE VOLTAGE: 300V between any terminal and chassis.

# **ENVIRONMENTAL**

OPERATING ENVIRONMENT: Specified for 0°C to 50°C. Specified to 40% R.H. at 35°C.

STORAGE ENVIRONMENT: -25°C to 65°C.

WEIGHT: 0.8kg (1.75 lbs).

