

SWITCH/CONTROL MODULE SPECIFICATIONS

Model 7703 32-Channel High Speed Differential Multiplexer

Features

- There are 32 channels for general purpose measurement.
- Relay actuation time of less than 1ms for high-speed scanning.
- 2 or 4 wire measurement.
- Two 50-pin female "D-sub" connectors are standard for secure hook-up and quick teardown.
- Reed relay based design with 300 volt, 500mA; 10VA.
- Two mating connector (Model 7788) supplied.

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: <1Ω 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 × 2.

RELAY DRIVE CURRENT: 20mA per channel.

ISOLATION BETWEEN ANY TWO TERMINALS: >10⁸Ω, <200pF.

ISOLATION BETWEEN ANY TERMINAL AND EARTH: >10⁸Ω, <400pF.

CROSS TALK (1 MHz, 50Ω Load): <-40dB.

INSERTION LOSS (50Ω Source, 50Ω 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 80% R.H. at 35°C.

STORAGE ENVIRONMENT: -25°C to 65°C.

WEIGHT: 0.8kg (1.75 lbs).

