

7708 40-Channel Differential Multiplexer w/Automatic CJC

GENERAL

40 CHANNELS: 40 channels of 2-pole relay input. All channels configurable to 4-pole.

RELAY TYPE: Latching electromechanical.

ACTUATION TIME: <3ms.

Specified for Model 2700, firmware revision BO2 or later.

CAPABILITIES

CHANNELS 1–40: Multiplex one of 40 2-pole or one of 20 4-pole signals into DMM. Configuration supports dual 1–20 independent multiplexers.

INPUTS

MAXIMUM SIGNAL LEVEL:

Channels (1–40): 300V DC or rms, 1A switched, 60W, 125VA maximum.

SAFETY: Conforms to European Union Directive 73/23/EEC EN61010-1, CAT I.

CONTACT LIFE (typ): >10⁵ operations at max signal level.
>10⁸ operations no load.¹

CONTACT RESISTANCE: <2 Ω at end of contact life.

CONTACT POTENTIAL: <±500nV typical per contact, 1μV max.
<±500nV typical per contact pair, 1μV max.

OFFSET CURRENT: <100pA.

CONNECTOR TYPE: Screw terminal, #20 AWG wire size.

ISOLATION BETWEEN ANY TWO TERMINALS: >10⁹ Ω, <200pF

ISOLATION BETWEEN ANY TERMINAL AND EARTH: >10⁹ Ω, <400pF

CROSS TALK (1MHz, 50 Ω Load): <-40dB.

INSERTION LOSS (50 Ω Source, 50 Ω Load): <0.35dB below 1MHz.
<3dB below 2MHz.

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

T/C COLD JUNCTION: 1.0°C (18°–28°C Mainframe Temp)
1.5°C (0°–18°C & 28°–50°C Mainframe Temp).

ENVIRONMENTAL:

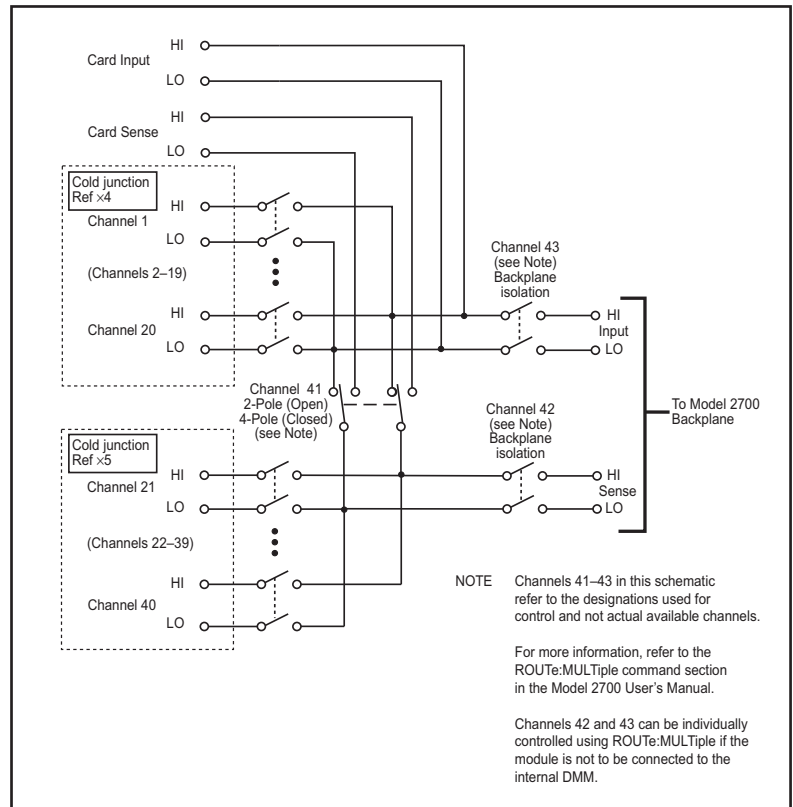
OPERATING ENVIRONMENT: Specified for 0°C to 50°C.

Specified to 80% R.H. at 35°C.

STORAGE ENVIRONMENT: -25°C to 65°C.

WEIGHT: 0.52kg (1.16 lb).

Specifications are subject to change without notice.



1. Open thermocouple detector on during thermocouple measurements.
Minimum signal level 10mV, 10uA.