

7065 HALL EFFECT CARD SPECIFICATIONS

(1 year, 0°-35°C; installed in scanner mainframe)

CONFIGURATION

Input characteristics and output matrix configurable for Van der Pauw or Hall Bar measurements. Input characteristics selectable for either low resistivity or high resistivity samples.

LOW RESISTIVITY MODE

Input Voltage Operating Range: +8V to -8V.
Input Impedance: >10GΩ in parallel with less than 420pf.
Input Bias Current: <100pA.
Input Voltage Noise: <50nVp-p, 0.1 to 10Hz bandwidth.
Input to Output Resistance: <30Ω.

HIGH RESISTIVITY MODE

Input Voltage Operating Range: +8V to -8V.
Input Impedance: >100TΩ in parallel with less than 3pF.
Input Bias Current: <150fA at 23°C. Doubles approximately every 10°C rise in ambient room temperature.
Input Voltage Noise: <10μVp-p, 0.1 to 10Hz bandwidth.
Output Resistance: <60Ω.

GENERAL

CONNECTORS

CURRENT SOURCE INPUT: Two-lug female triaxial. Input high to low clamped at ±12V. Maximum Input: 100mA.
SAMPLE INPUTS: Four two-lug female triaxial. Outer shell is analog ground. Inner shield is driven guard. **Maximum Input Overload** (HI to analog ground or guard to analog ground): ±12V.
CURRENT MONITOR OUTPUT: Insulated female BNC.
MEASUREMENT OUTPUTS: Spring-loaded terminals. Accepts AWG. #18 to #24 wire. Maximum load: 1mA.

MAXIMUM COMMON MODE VOLTAGE (analog ground to earth ground): 30V peak, dc to 60Hz sine wave.

ISOLATION: Analog ground to earth ground: Greater than 10⁹Ω in parallel with 150pF.

WARMUP: 1 hour to rated specifications.

ENVIRONMENT: **Operating:** 0°-35°C, up to 70% R.H.
Storage: -25° to 65°C

DIMENSIONS, WEIGHT: 32mm high x 114mm wide x 272mm long (1 in. x 4 in. x 10 in.). Net weight: 434kg (15.5 oz.).


ACCESSORIES SUPPLIED

Model 7078-TRX-10
 Model 4801 Low Noise Input Cable
 Model 7025-10 Triaxial Input Cable (10 ft.). Four supplied
 Model 6172
 Model 7008-6 IEEE-488 Cable (6 ft.)
 Model 4851 BNC Shorting Plug
 SC-72-0 Single Conductor Insulated Wire, Black (4 ft.). Two supplied
 SC-72-9 Single Conductor Insulated Wire, White (4 ft.)
 BG-5 Single Banana Plug, Black. Two supplied
 BG-10-1 Single Banana Plug, White
 BG-7 Double Banana Plug, Black
 SC-8 2-Conductor Cable w/Shield (10 ft.)

Specifications subject to change without notice.

HW 5/25/05
 Rev. C
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BRUNING 40-21 62198-SBG

LTR	REVISIONS	APP.	DATE	DRN. MH	DATE	 Keithley Instruments, Inc. Cleveland, Ohio 44139
A	11751 Released	SZ	11/4/86	CKD. SZ	DATE 11-4-86	
B	11811 Del 7008-3 Revised	SZ	12/17/86	APP.	DATE	
C	40064 Revised	SZ	4/15/05			
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