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Data Sheet

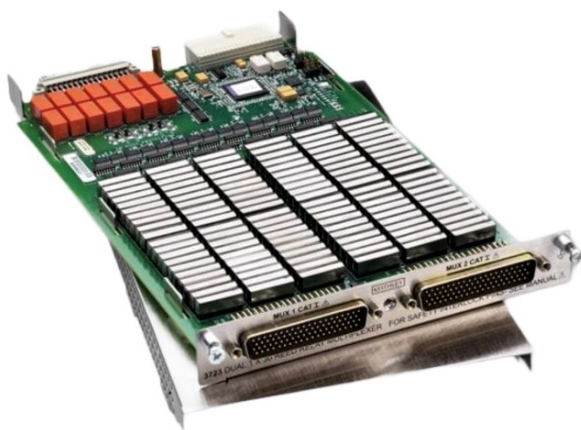
August 13, 2026

KEITHLEY

Keithley 3723

The Keithley 3723 isaSeries 3700A plug-in multiplexer card with two independent 1×30 two-pole banks of dry reed relays. Banks combine to a 1×60 two-pole or 1×120 single-pole multiplexer. Actuation is under 0.5 ms for high-throughput scanning with 2600B SourceMeter I-V systems. Signal path is 200 V, 1 A switched (1.25 A carry), 15 W. Two 78-pin male D-shells; optional 3723-ST screw terminals. High-speed scanned I-V with Series 2600B SMUs 3706A production multiplexed DCV and ohms One-wire common-side measurements to 120 channels

Keithley 3723 Dual 1×30 High Speed Reed Multiplexer Card The Keithley 3723 isaSeries 3700A plug-in multiplexer card with two independent 1×30 two-pole banks of dry reed relays. Banks combine to a 1×60 two-pole or 1×120 single-pole multiplexer. Actuation is under 0.5 ms for high-throughput scanning with 2600B SourceMeter I-V systems. Signal path is 200 V, 1 A switched (1.25 A carry), 15 W. Two 78-pin male D-shells; optional 3723-ST screw terminals. High-speed scanned I-V with Series 2600B SMUs 3706A production multiplexed DCV and ohms



MODEL

Keithley 3723

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

3723

LISTING

<https://aumictechlabs.com/products/3723-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keithley 3723 is a dual-bank, high-speed multiplexer card for the Series 3700A mainframe, delivering configurable switching across 30 to 120 channels. Two independent 1×30 two-pole multiplexer banks interconnect via mainframe relays to form 1×60 two-pole, 1×30 four-pole, or

1×120 single-pole configurations. High-speed reed relays with actuation times below 0.5 ms enable scanning rates exceeding 800 channels/s, making the 3723 ideal for multi-channel I-V characterization, parametric testing, and complex data acquisition. The card maintains contact potential of $\pm 6 \mu\text{V}$ (differential) and $\pm 12 \mu\text{V}$ (single-ended) while supporting 1-, 2-, and 4-wire measurement topologies. Rated for switching up to 200 V DC/RMS at 1 A with 1.25 A carry capacity, it delivers 20 MHz bandwidth and $10^{10} \Omega$ isolation across all configurations. Technical Specifications

Multiplexer Banks: Two independent 1×30 two-pole banks; interconnectable via relays to 1×60 two-pole or 1×120 single-pole

Relay Type: High-speed reed relays, 10^9 operations at no load, 1×10^7 operations at 100 V/10 mA

Electrical: 20 MHz bandwidth; 200 V DC/RMS switching; 1 A switch, 1.25 A carry; 15 W max power; 300 V DC/RMS common mode; 8×10^7 volt-hertz limit

Performance: >800 channels/s scan rate; $< 1.5 \Omega$ channel resistance (1×30 2-pole); $< 2.0 \Omega$ (1×60 1-pole with 3723-ST); $\pm 6 \mu\text{V}$ differential contact potential; $\pm 12 \mu\text{V}$ single-ended; $< 250 \text{ pA}$ offset current

Isolation: $10^{10} \Omega$ differential (260 pF); $10^{10} \Omega$ bank-bank (75 pF); $10^{10} \Omega$ common mode (280 pF); crosstalk $< -55 \text{ dB}$ @ 300 kHz, $< -50 \text{ dB}$ @ 1 MHz, 120 channels

Long relay life with predictable contact degradation

Low thermal offset for precision low-level switching

Support for differential and single-ended measurements

Typical Applications

- Multi-channel I-V characterization with Series 2600B SourceMeter instruments
- High-throughput parametric device testing
- Automated production test and burn-in
- Data acquisition on large channel-count test systems

Compatibility & Integration The 3723 integrates into the Keithley Series 3700A mainframe via the analog backplane, enabling mixed-module configurations and synchronized scanning across multiple card types.

3723 Characteristics / Specifications

PARAMETER	VALUE
Model	3723
Manufacturer	Keithley Instruments (Tektronix)
Instrument Type	High speed reed multiplexer card
Alias	3723; Keithley 3723 Dual 1×30
Host Mainframe	Series 3700A (3706A class)
Channel Count Two Pole	60 differential (dual 1×30)
Channel Count Four Pole	30
Channel Count Single Pole	120 (dual 1×60 one-wire)
Contact Configuration	2 pole FormA Relay Type: dry reed
Actuation Time	less than 0.5 ms
Max Signal Voltage	200 V DC or RMS
Max Switched Current	1 A
Max Carry Current	1.25 A
Max Power	15 W
Common Mode Voltage	300 V DC or RMS any terminal to chassis
Volt Hertz Limit	8e7
Contact Life No Load	greater than 1e9 operations
Contact Life Loaded	1e7 operations at 100 V, 10 mA
Channel Resistance Dual	less than 1.5 ohm end of life
Channel Resistance Combined	less than 2.0 ohm (1×60)
Contact Potential Differential	less than plus/minus 6 uV
Offset Current	less than plus/minus 250 pA
Isolation Differential	1e10 ohm, 260 pF class (dual 1×30)
Crosstalk At 300 kHz	less than minus 55 dB
Bandwidth Dual	20 MHz

PARAMETER	VALUE
Connector Type	two 78 pin male D-shells
Relay Drive Current	10 mA
Operating Temperature	0 to 50 C
Weight	2.2 lb class
Screw Terminal Option	3723-ST; 22 AWG typical Notes Specs from Keithley 3723 Dual 1×30 High Speed Multiplexer specification (SPEC-3723 / 3700A switch-card datasheet). Confirm 3723-ST versus D-sub cabling and 1/2/4-wire bank jumpers on the installed card.
Bandwidth	Dual: 20 MHz

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to 50 C
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Weight	2.2 lb class
Screw Terminal Option	3723-ST; 22 AWG typical Notes Specs from Keithley 3723 Dual 1×30 High Speed Multiplexer specification (SPEC-3723 / 3700A switch-card datasheet). Confirm 3723-ST versus D-sub cabling and 1/2/4-wire bank jumpers on the installed card.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Model	3723
Manufacturer	Keithley Instruments (Tektronix)
Instrument Type	High speed reed multiplexer card
Specifications	
PARAMETER	VALUE
Alias	3723; Keithley 3723 Dual 1x30
Host Mainframe	Series 3700A (3706A class)
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Channel Count Single Pole	120 (dual 1x60 one-wire)
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Actuation Time	less than 0.5 ms
Max Signal Voltage	200 V DC or RMS
Max Switched Current	1 A
Specifications	
PARAMETER	VALUE
Max Carry Current	1.25 A
Max Power	15 W
Common Mode Voltage	300 V DC or RMS any terminal to chassis

Specifications

PARAMETER	VALUE
Volt Hertz Limit	8e7
Contact Life No Load	greater than 1e9 operations
Contact Life Loaded	1e7 operations at 100 V, 10 mA

Specifications

PARAMETER	VALUE
Channel Resistance Dual	less than 1.5 ohm end of life
Channel Resistance Combined	less than 2.0 ohm (1x60)
Contact Potential Differential	less than plus/minus 6 uV

Specifications

PARAMETER	VALUE
Offset Current	less than plus/minus 250 pA
Isolation Differential	1e10 ohm, 260 pF class (dual 1x30)
Crosstalk At 300 kHz	less than minus 55 dB

Specifications

PARAMETER	VALUE
Bandwidth Dual	20 MHz
Connector Type	two 78 pin male D-shells
Relay Drive Current	10 mA

Specifications

PARAMETER	VALUE
Operating Temperature	0 to 50 C
Weight	2.2 lb class
Screw Terminal Option	3723-ST; 22 AWG typical

Notes

Specs from Keithley 3723 Dual 1x30 High Speed Multiplexer specification (SPEC-3723 / 3700A switch-card datasheet). Confirm 3723-ST versus D-sub cabling and 1/2/4-wire bank jumpers on the installed card.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Generated August 13, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.