

**Keithley Instruments**

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**SPECIFICATION CONDITIONS**

This document contains specifications information for the Model 3762 10-channel High Voltage Multiplexer Card. Specifications are the standards against which the Model 3762 is tested. Upon leaving the factory, the Model 3762 meets these specifications. Typical and characteristic values are nonwarranted, apply at 23 °C (73 °F), and are provided solely as useful information. Measurement accuracies are specified under these conditions: 23 °C  $\pm$ 5 °C, 5 percent to 70 percent relative humidity, non-condensing.

Category	Specification	
<b>Channel configuration</b>	1 x 10 double-pole multiplexer	
<b>Contact configuration</b>	2 Form A with user selectable shield or driven guard	
<b>Connector type</b>	Screw terminals, No. 16 AWG maximum wire size with .092 inch O.D. 33 conductors (wires) per card maximum	
<b>Maximum signal levels</b>	Voltage: 1000 V peak	
	Carry current: 1 A, peak or DC	
	Switching current: 0.5 A, RMS or DC	
	Switching power: 10 W	
<b>Contact life</b>	>10 <sup>8</sup> closures (cold switching); >1 x 10 <sup>6</sup> closures (at 1000 V/1 mA)	
<b>Contact resistance</b>	<200 m $\Omega$ initial, 2 $\Omega$ to rated life	
<b>Contact potential</b>	<35 $\mu$ V per contact pair	
<b>Channel-to-channel isolation</b>	>10 <sup>10</sup> $\Omega$ , <10 pF	
<b>Input isolation</b>	<b>Differential</b>	>10 <sup>9</sup> $\Omega$ , <10 pF
	<b>Common mode</b>	>10 <sup>9</sup> $\Omega$ , <150 pF
<b>Common mode voltage</b>	1000 V peak	
<b>Volt-hertz limit</b>	8 x 10 <sup>7</sup>	

Category	General specification
Warm up	One hour to rated accuracies
Actuation time	<2 ms, exclusive of mainframe
Relay type	2 Form A dry reed
Relay drive current	80 mA per relay (typical)
Relay drive scheme	Direct
Environment	<p><b>Indoor use only</b></p> <p><b>Operating:</b> 0 °C to 50 °C (32 °F to 122 °F), 70% relative humidity up to 35 °C (95 °F); derate 3% relative humidity per °C, 35 °C to 50 °C, noncondensing</p> <p><b>Storage:</b> -25 °C to 65 °C (-13 °F to 149 °F)</p> <p><b>Altitude:</b> 0 to 2000 m (0 to 6562 feet) above sea level</p> <p><b>Pollution degree:</b> 2</p>
Dimensions	25.40 mm high x 166.12 mm wide x 263.40 mm long (1.00 in. x 6.54 in. x 10.37 in.)
Weight	0.99 kg (2.2 lb)
Safety	NRTL listed to UL61010-1 and CAN/CSA C22.2 NO. 61010-1-12; UL 61010-2-030 and CAN/CSA-22.2 NO.61010-2-030-12. Conforms with European Union Low Voltage Directive
EMC	Conforms to European Union EMC Directive