

Selector Guide

Switch Cards for 7001, 7002

	No. of Channels	Card Config.	Contact Config.	Max. Voltage	Max. Current	Max. Power	Contact Potential	Max. Offset Current	Recomm. Frequency	Connection Type	CE	Comments
HIGH DENSITY												
7011-C	40	Multiplexer	2 form A	110V	1A	60VA	<1 μ V	<100pA	2MHz	Connector	Yes	Four independent 1 \times 10 multiplexers, connection to backplane
7011-S	40	Multiplexer	2 form A	110V	1A	60VA	<500nV	<100pA	2MHz	Screw term.	Yes	Four independent 1 \times 10 multiplexers, connection to backplane
7012-C	4 \times 10	Matrix	2 form A	110V	1A	60VA	<1 μ V	<100pA	2MHz	Connector	Yes	Rows connect to analog backplane
7012-S	4 \times 10	Matrix	2 form A	110V	1A	60VA	<500nV	<100pA	2MHz	Screw term.	Yes	Rows connect to analog backplane
7013-C	20	Isolated Switch	2 form A	110V	1A	60VA	<1 μ V	<100pA	10MHz	Connector	Yes	
7013-S	20	Isolated Switch	2 form A	110V	1A	60VA	<500nV	<100pA	10MHz	Screw term.	Yes	
7015-C	40	Multiplexer	2 form A	175V	34mA	0.3VA	<5 μ V	<1nA	500kHz	Connector	Yes	Solid state switch for high reliability
7015-S	40	Multiplexer	2 form A	175V	34mA	0.3VA	<5 μ V	<1nA	500kHz	Screw term.	Yes	Solid state switch for high reliability
7018-C	28	Multiplexer	3 form A	110V	1A	60VA	<5 μ V	<100pA	2MHz	Connector	Yes	3 pole switching
7018-S	28	Multiplexer	3 form A	110V	1A	60VA	<5 μ V	<100pA	2MHz	Screw term.	Yes	3 pole switching
7035	36	Multiplexer	2 form A	60V	1A	30VA	<1 μ V	<100pA	10MHz	Connector	Yes	9 independent 1 \times 4 multiplexers
7036	40	Isolated Switch	1 form A	60V	1A	30VA	<4 μ V	<100pA	10MHz	Connector	Yes	40 independent channels of 1-pole switching
7111-S	40	Multiplexer	1 form C	110V	1A	60VA	<500nV	<100pA	2MHz	Screw term.	Yes	Four independent 1 \times 10 multiplexers, connection to backplane

CONTROL

7019-C	Dual 3 \times 6	Matrix	1 form A	200V	1A	10VA	<25 μ V	<100pA	2MHz	Connector	Yes	6-wire resistance measurements
7020	80	Digital I/O								Connector	Yes	40 inputs/40 outputs
7020-D**												
7021	30/20	Mux/ Digital I/O	2 form A	110V	1A	30VA	<3 μ V	<100pA	10MHz	Connector	Yes	Dual multiplexers. Up to 30 channels, 10 digital inputs, 10 digital outputs.
7022	30/20	Matrix/ Digital I/O	2 form A	110V	1A	30VA	<3 μ V	<100pA	10MHz	Connector	Yes	5 row \times 6 column matrix, 10 digital inputs, 10 digital outputs.
7037	30/20	Isolated/ Digital I/O	1 form A	110V	1A	30VA	<4 μ V	<100pA	10MHz	Connector	Yes	30 independent channels of 1-pole switching, 10 digital inputs, 10 digital outputs
7037-D**												
7065												Hall Effect measurement buffer card

RF

7062	Double 1 \times 5	2 isolated switches	1 pole, 5 throw	24V	50mA	0.5VA	<20 μ V		500MHz	BNC	Yes	50 Ω unterminated
7063	Double 1 \times 5	2 isolated switches	1 pole, 5 throw	5V	50mA	0.5VA	<20 μ V		500MHz	BNC	Yes	50 Ω terminated
7016A	Double 1 \times 4	2 isolated switches	1 pole, 4 throw	30V	500mA	10VA	<6 μ V		2GHz	SMA	Yes	Optional 50 Ω termination
7017	Double 1 \times 4	2 isolated switches	1 pole, 4 throw	30V	1A	10VA	<25 μ V		800MHz	SMA	Yes	10 ⁸ closures contact life.
7038	12	Three 1 \times 4 multiplexers	1 pole, 1 of 4 tree	24V	10mA	10W @ 1.2GHz	<15 μ V		2GHz	75 Ω SMB receptacle	Yes	75 Ω unterminated

OPTICAL

	No. of Channels	Fiber Type	Wavelength (nm)	Connector	Fiber Length
7090-4-1	1 \times 4	Single mode fiber (SMF-28) 9/125	1290–1650	FC/APC	1 m
7090-4-2BH	1 \times 4	Single mode fiber (SMF-28) 9/125	1290–1650	FC/SPC	Bulkhead connectors
7090-8-3	1 \times 8	Single mode fiber (SMF-28) 9/125	1290–1650	FC/APC	1 m
7090-8-4	1 \times 8	Multimode fiber 62.5/125	780–1350	FC/SPC	1 m

1.888.KEITHLEY (U.S. only)

www.keithley.com

KEITHLEY

A GREATER MEASURE OF CONFIDENCE

Selector Guide

Switch Cards for 7001, 7002

	No. of Channels	Card Config.	Contact Config.	Max. Voltage	Max. Current	Max. Power	Max. Contact Potential	Offset Current	Recomm. Frequency	Connection Type	CE	Comments
HIGH CURRENT												
7053	10	Multiplexer	2 form A	300V	5A	100VA	<1mV		1MHz	Screw term.		
HIGH VOLTAGE												
7054	10	Multiplexer	1 form A	1000V	500mA	10VA			1MHz	Screw term.	Yes	
7154	10	Multiplexer	2 form A	1100V	500mA	10VA	<35 μ V		1MHz	Screw term.	Yes	
7169A	20	Isolated switch	1 form C	500V	500mA	10VA	<30 μ V		2MHz	Connector	Yes	Coupon testing. Use with 7002 only.
LOW CURRENT												
7058	10	Multiplexer	1 form C	200V	100mA		<250 μ V	<1pA	3MHz	2-lug triax	Yes	Can also be used as a voltage switch
7152	4x5	Matrix	2 form A	200V	500mA	10VA	<20 μ V	<1pA	60MHz	Connector	Yes	
7153	4x5	Matrix	2 form A	1300V	500mA	10VA	<50 μ V	<1pA	60MHz	Connector	Yes	
7158	10	Multiplexer	1 form C	30V	100mA		<200 μ V	<1pA	1MHz	BNC	Yes	
LOW VOLTAGE												
7059	10	Multiplexer	2 form A	200V	100mA	2VA	<1 μ V		3MHz	Screw term.	Yes	
7064	20*	Multiplexer	2 form A	40V	100mA	2VA	<1 μ V		10MHz	Screw term.	Yes	
7067	10	Multiplexer	4 form A	150V	350mA	10VA	<1 μ V		1MHz	Screw term.	Yes	4 wire resistance measurements
7168	8	Multiplexer	2 form A	10V	50mA		<30nV		1kHz	Screw term.	Yes	
THERMOCOUPLE												
7014	39	Multiplexer	2 form A	110V	1A	60VA	<1 μ V	<100pA	2MHz	Screw term.	Yes	Built-in cold junction ref.
7057A	9	Multiplexer	2 form A	42V	100mA	2VA	<1 μ V			Screw term.	Yes	Built-in cold junction ref: -1mV/ $^{\circ}$ C (0mV at +30 $^{\circ}$ C)
GENERAL PURPOSE Can also be used with Models 705 and 706												
7052	4x5	Matrix	3 form A	200V	200mA	10VA	<5 μ V	<100pA	3MHz	Screw term.	Yes	Switched High, Low, Guard
7056	10/20*	Multiplexer	2 form A	150V	250mA	10VA	<100 μ V		10MHz	Screw term.	Yes	10 channel 2-pole, 20 channel 1-pole
7066	10	Isolated switch	2 form A	350V	2A	125VA	<30 μ V		3MHz	Screw term.	Yes	
7156-D	10/20*	Multiplexer	2 form A	150V	500mA	10VA	<100 μ V		3MHz	Connector	Yes	
7164-D	20*	Multiplexer	2 form A	100V	500mA	10VA	<50 μ V		3MHz	Connector	Yes	
7166	10	Isolated switch	2 form A	300V	750mA	30VA	75 μ V typ.		3MHz	Connector	Yes	Mercury wetted contacts
PROTOTYPE & ADAPTER CARD Can also be used with Models 705 and 706												
7061	10											Prototyping

* An even numbered channel and an odd numbered channel cannot be turned on at the same time (only in the 20 channel mode for 10/20 channel cards).

** Cards with a -D suffix feature D-sub connectors.

1.888.KEITHLEY (U.S. only)

www.keithley.com

KEITHLEY

A GREATER MEASURE OF CONFIDENCE

www.valuetronics.com

Selector Guide

Switch Card Accessories

7001, 7002, 705, 706 Switch Card Accessories

Cables				Connectors		Adapters		Tools	
7011-C	7011-MTC-1	7011-MTC-2		7011-KIT-R	7011-MTR				
7011-S				7011-ST					
7111-S									
7012-C	7011-MTC-1	7011-MTC-2		7011-KIT-R	7011-MTR				
7012-S				7012-ST					
7013-C	7011-MTC-1	7011-MTC-2		7011-KIT-R	7011-MTR				
7013-S				7013-ST					
7014	7401			7014-ST					
7015-C	7011-MTC-1	7011-MTC-2		7011-KIT-R	7011-MTR				
7015-S				7015-ST					
7018-C	7011-MTC-1	7011-MTC-2		7011-KIT-R	7011-MTR				
7018-S				7018-ST					
7019	7019-C-MTCL-2	7019-C-MTC-2		7011-KIT-R	7011-MTR				
7020	7020-MTC-2			7011-KIT-R (incl.)	7011-MTR				
7020-D				7020-DT					
7021	7011-MTC-1	7011-MTC-2		7011-KIT-R (incl.)	7011-MTR				
7022	7011-MTC-1	7011-MTC-2		7011-KIT-R (incl.)	7011-MTR				
7035	7035-MTC-2			7011-KIT-R (incl.)	7011-MTR				
7036	7036-MTC-2			7011-KIT-R (incl.)	7011-MTR				
7037	7011-MTC-1	7011-MTC-2		7011-KIT-R (incl.)	7011-MTR				
7037-D				7037-DT					
7057A	7401								
7058	7024-3 (incl.)	7024-10	7025-10	7023		6146, 6147	6172		
7062	7051-2, -5, -10								
7063	7051-2, -5, -10								
7152	7152-MTC-2, -10	7152-TRX-10		7152-KIT	7152-MTR			7152-HCT	7074-CIT
								7074-HCT	
7153	7153-TRX								
7156-D	7156-MTC-10			7156-KIT	7156-MTR				
7158	4801	4802-10	4803			4804			
7164-D	7164-MTC-10			7164-KIT	7164-MTR (incl.)				
7169A	7169-MTC-10			7169-KIT	7169-MTR			7078-CIT	7078-HCT

1.888.KEITHLEY (U.S. only)

www.keithley.com

KEITHLEY

A GREATER MEASURE OF CONFIDENCE