# Product Fact Sheet Keysight Electromechanical Bypass Switches



The Keysight Technologies, Inc. electromechanical bypass switches provide reliable switching in signal routing, switch matrices and ATE systems. With 0.03 dB insertion loss repeatability at 40 GHz guaranteed up to 5 million cycles (10 million cycles typical) and exceptional isolation, Keysight bypass switches provide the performance you need from DC to 67 GHz.

## High performance

- Guaranteed performance

< 0.03 dB insertion loss repeatability at 40 GHz guaranteed for 5 million cycles

- Long operating life
- 10 million cycles (typical) – High isolation

Typically > 70 dB at 67 GHz



#### Product specifications

Model	Frequency (GHz)	Termination	Average power (W)	Peak power (W)	Insertion loss (dB)	SWR	Speed (ms)	Life cycle (million)	Driving voltage (Vdc)	RF connectors
N1811TL	DC to 67	Terminated	1	50	1.12	1.90	15	5	5, 15, 24	SMA (f), 2.92 mm, 2.4 mm, 1.85 mm
N1812UL	DC to 67	Unterminated	1	50	1.12	1.90	15	5	5, 15, 24	SMA (f), 2.92 mm, 2.4 mm, 1.85 mm
8763A	DC to 4	Terminated	1	100	0.25	1.2	30	1	5, 15, 24	SMA (f)
8763B	DC to 8	Terminated	1	100	1.3	1.3	30	1	5, 15, 24	SMA (f)
8763C	DC to 26.5	Terminated	1	100	1.8	1.8	30	1	5, 15, 24	3.5 mm (f)
8764A	DC to 4	Unterminated	2	100	0.25	0.25	30	1	5, 15, 24	SMA (f)
8764B	DC to 8	Unterminated	2	100	0.5	0.5	30	1	5, 15, 24	SMA (f)
8764C	DC to 26.5	Unterminated	2	100	1.25	1.25	30	1	5, 15, 24	3.5 mm (f)

#### Keysight bypass switch option

Model	Option	Option	Option description	
N1811TL/	Frequency	004	DC to 4 GHz	
N1812UL	range	020	DC to 20 GHz	
		026	DC to 26.5 GHz	
		040	DC to 40 GHz	
		050	DC to 50 GHz	
		067	DC to 67 GHz	
	Coil voltage	105	5 Vdc and includes option 402	
		115	15 Vdc	
		124	24 Vdc	
	DC connector	201	D-submini 9 pin (f)	
		202	Solder lugs	
	Performance	301 <sup>1</sup>	High isolation	
		302 <sup>1</sup>	Low SWR & insertion loss	
		UK6	Calibration certificate with test data	
	Drive	401	TTL/5V CMOS compatible	
		402	Position indicator	

### Keysight bypass switch option (continued)

Model	Option	Option	Option description
8763A/ 8763B/	Drive	T15	TTL/5V CMOS compatible logic with 15 Vdc supply
8763C/ 8764A/ 8764B/		T24	TTL/5V CMOS compatible logic with 24 Vdc supply
8764D/ 8764C	Coil voltage	024	24 Vdc
		011	5 Vdc
		015	15 Vdc

For more details on the Keysight solid state switches and ordering information see the "Keysight RF and Microwave Switch Selection Guide", literature number 5989-6031EN.

For more information on Keysight switches, please visit

www.keysight.com/find/switches

Download or order from www.keysight.com/find/mta

To find a distributor in your area, go to: www.keysight.com/find/distributors

Three-Year Warranty

#### www.keysight.com/find/ThreeYearWarranty

Keysight's commitment to superior product quality and lower total cost of ownership. The only test and measurement company with three-year warranty standard on all instruments, worldwide. Keysight Assurance Plans

#### www.keysight.com/find/AssurancePlans

Up to five years of protection and no budgetary surprises to ensure your instruments are operating to specification so you can rely on accurate measurements.

1. Not available for option 040, 050 and 067.



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