

# Keysight High Performance Multiport Switches



Keysight 8766/67/68/69 Series



Keysight 87104/106 Series and 87204/206 Series

Keysight's high-performance electromechanical coaxial switches provide reliable switching in signal routing, switch matrices, and ATE systems. With 0.03 dB insertion loss repeatability guaranteed up to 5 million cycles (10 million typical) and exceptional isolation, Keysight high-performance switches provide the performance you need from DC to 50 GHz.

## High performance

Superior performance with guaranteed specifications to 50 GHz

- **Guaranteed performance**  
< 0.03 dB insertion loss repeatability guaranteed for 5 million cycles
- **Long operating life**  
10 million cycles (typical)
- **High isolation**  
Typically > 85 dB at 26.5 GHz
- **Low SWR**  
Minimize measurement uncertainty
- **Unique design**  
Wiping action mechanism eliminates particle buildup to ensure reliable switching
- **Broad frequency range**  
DC to 4, 20, 26.5, 40 or 50 GHz

Model	Frequency (GHz)	Termination	Average power (W)	Peak power (W)	Isolation (dB)	Insertion loss (dB)	SWR	Speed (ms)	Life cycle (million)	Driving voltage (Vdc)	RF connectors
<b>SP3T</b>											
8766K	DC to 26.5	Unterminated	1	100	60	1.5	1.8	20	5	5, 15, 24	3.5 mm (f)
<b>SP4T</b>											
87104A	DC to 4	Terminated	1	50	100	0.36	1.2	15	5	24	SMA (f)
87204A	DC to 4	Terminated	1	50	100	0.36	1.2	15	5	24	SMA (f)
87104B	DC to 20	Terminated	1	50	70	0.6	1.45	15	5	24	SMA (f)
87204B	DC to 20	Terminated	1	50	70	0.6	1.45	15	5	24	SMA (f)
87104C	DC to 26.5	Terminated	1	50	65	0.7	1.7	15	5	24	SMA (f)
87204C	DC to 26.5	Terminated	1	50	65	0.7	1.7	15	5	24	SMA (f)
87104D	DC to 40	Terminated	1	50	65	0.7	1.95	15	5	24	2.92 mm (f)
8767K	DC to 26.5	Unterminated	1	100	60	1.5	1.8	20	5	5, 15, 24	3.5 mm (f)
8767M	DC to 50	Unterminated	1	100	60	2.7	2.3	20	5	5, 15, 24	2.4 mm (f)
<b>SP5T</b>											
8768K	DC to 26.5	Unterminated	1	100	60	1.5	1.8	20	5	5, 15, 24	3.5 mm (f)
8768M	DC to 50	Unterminated	1	100	60	2.7	2.3	20	5	5, 15, 24	2.4 mm (f)
<b>SP6T</b>											
87106A	DC to 4	Terminated	1	50	100	0.36	1.2	15	5	24	SMA (f)
87206A	DC to 4	Terminated	1	50	100	0.36	1.2	15	5	24	SMA (f)
87106B	DC to 20	Terminated	1	50	70	0.6	1.45	15	5	24	SMA (f)
87206B	DC to 20	Terminated	1	50	70	0.6	1.45	15	5	24	SMA (f)
87106C	DC to 26.5	Terminated	1	50	65	0.7	1.7	15	5	24	SMA (f)
87206C	DC to 26.5	Terminated	1	50	65	0.7	1.7	15	5	24	SMA (f)
87106D	DC to 40	Terminated	1	50	65	0.7	1.95	15	5	24	2.92 mm (f)
8769K	DC to 26.5	Unterminated	1	100	60	1.5	2.05	20	5	24	3.5 mm (f)
8769M	DC to 50	Unterminated	1	100	60	2.7	2.3	20	5	5, 15, 24	2.4 mm (f/m)

For more details on Keysight EM 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](http://www.keysight.com/find/switches)

Download or order from [www.keysight.com/find/mta](http://www.keysight.com/find/mta)

To find a distributor in your area, go to [www.keysight.com/find/distributors](http://www.keysight.com/find/distributors)

### High performance multiport switch option

Model	Option type	Option	Option description
87104A / 87104B / 87104C / 87104D / 87106A / 87106B / 87106C / 87106D	Control logic	T24	TTL/5V CMOS compatible logic with 24 Vdc supply
		024	24 Vdc
	DC connectors	161	Ribbon receptacle
		100	Solder terminals
8766K / 8767K / 8768K / 8769K	Coil voltage	024	24 Vdc
		011	5 Vdc
		015	15 Vdc
	RF connector	002	SMA (f) (Use to 18 GHz only)
004		3.5 mm (f)	
DC connectors	060	5 feet DC control cable; 12-pin viking	
	016	16-inch ribbon cable extension	

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