

8 GHz SP8T RF Switch

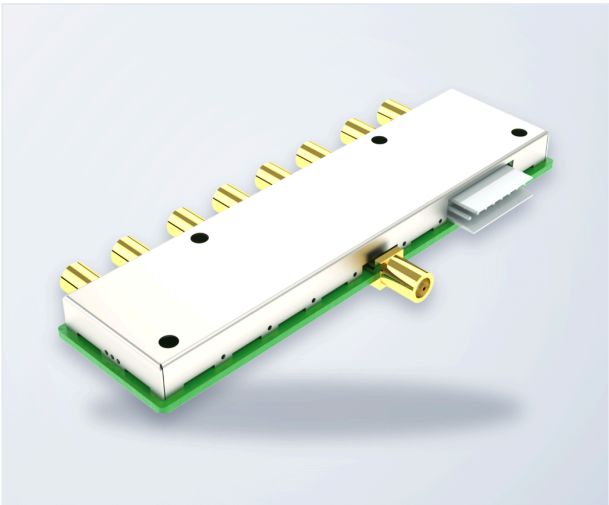
RFS-1969

I/O CONTROLLED

Bluelec RFS-1969 is a solid-state SP8T RF switch module covering 10 MHz to 8 GHz. It routes one common RF port to any of eight selectable RF paths and terminates unused paths internally to 50 Ω for stable, predictable RF performance.

The four-line I/O control interface enables simple digital control and easy integration into automated RF test systems. With solid-state switching, the RFS-1969 eliminates mechanical contact wear and provides high repeatability over large numbers of switching cycles.

Designed for RF test and measurement environments ranging from laboratory use to automated production testing, the RFS-1969 combines low insertion loss, high isolation, long operating life, and reliable electronic control in a compact switch module.



RF & DC SPECIFICATIONS

typical @ 25 °C

Operating frequency	10 MHz – 8 GHz	Frequency	Ins. loss	Ret. loss	Isolation
Impedance	50 Ω	1 GHz	1.1 dB	20 dB	50 dB
RF connectors	SMA (f)	3 GHz	1.5 dB	18 dB	40 dB
Input power (RF)	1 W (CW)	6 GHz	2.3 dB	15 dB	35 dB
Supply voltage	5 – 12 V	8 GHz	3.3 dB	12 dB	30 dB
Supply current (max, +12 V)	10 mA	Insertion & return loss, and isolation are typical values.			
Switching time	<25 μs				

CONTROL INTERFACE

HE14 8-pin

CONTROL TABLE

COM to

Pin	Signal	CTRL1	CTRL2	CTRL3	CTRL4	COM to
1	+12 VDC	0 V	0 V	0 V	0 V	RF1
2	NC	0 V	0 V	12 V	0 V	RF2
3	NC	0 V	12 V	0 V	0 V	RF3
4	CTRL1	0 V	12 V	12 V	0 V	RF4
5	CTRL2	12 V	0 V	0 V	0 V	RF5
6	CTRL3	12 V	0 V	12 V	0 V	RF6
7	CTRL4	12 V	12 V	0 V	0 V	RF7
8	GND	12 V	12 V	12 V	0 V	RF8

CTRL4 = 12 V disables all outputs (COM isolated from RF1–RF8).

MECHANICAL	ENVIRONMENTAL
Dimensions 49.05 × 110 × 10.3 mm (1.93 × 4.33 × 0.41 in)	Operating temperature 0 – 50 °C
Weight 46 g (1.62 oz)	Storage temperature –20 ... +70 °C
Compliance RoHS	Relative humidity 95 % at +40 °C

3D CAD models available on request via sales@bluelec.com