

6 GHz SP4T RF Switch

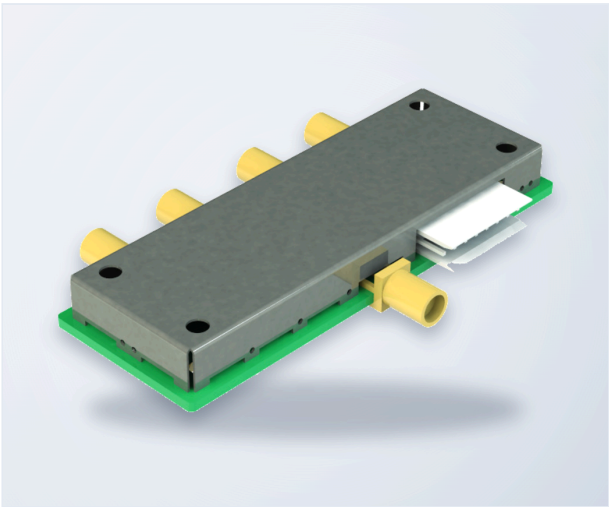
RFS-1684

I/O CONTROLLED

Bluelec RFS-1684 is a solid-state SP4T RF switch module covering 10 Hz to 6 GHz. It routes one common RF port to any of four selectable RF paths and terminates unused paths internally to 50 Ω for stable, predictable RF performance.

The two-line I/O control interface enables simple digital control and easy integration into automated RF test systems. With solid-state switching, the RFS-1684 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-1684 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 Hz – 6 GHz	Frequency	Ins. loss	Ret. loss	Isolation
Impedance	50 Ω	1 GHz	1.0 dB	20 dB	60 dB
RF connectors	SMA (f)	3 GHz	1.7 dB	18 dB	50 dB
Input power (RF)	1 W (CW)	6 GHz	2.1 dB	15 dB	35 dB
Supply voltage	12 V	Insertion & return loss, and isolation are typical values.			
Supply current (max, +12 V)	10 mA				
Switching time	<25 μs				

CONTROL INTERFACE

HE14 8-pin

CONTROL TABLE

COM to

Pin	Signal	CTRL1	CTRL2	RF1	RF2	RF3	RF4
1	+12 VDC	0 V	0 V	ON	OFF	OFF	OFF
2	GND	0 V	12 V	OFF	ON	OFF	OFF
3	NC	12 V	12 V	OFF	OFF	ON	OFF
4	NC	12 V	0 V	OFF	OFF	OFF	ON
5	CTRL1						
6	GND						
7	CTRL2						
8	GND						

MECHANICAL	ENVIRONMENTAL
Dimensions 49.05 × 82 × 10.3 mm (1.93 × 3.23 × 0.41 in)	Operating temperature 0 – 50 °C
Weight 34 g (1.20 oz)	Storage temperature -20 ... +70 °C
Compliance RoHS	Relative humidity 95 % at +40 °C

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