

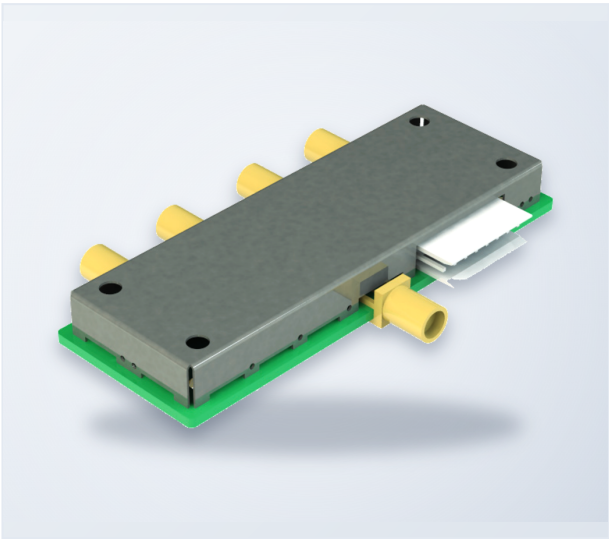
6 GHz SP4T RF Switch

RFS-777 | I²C CONTROLLED

Bluelec RFS-777 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 integrated I²C control interface enables simple digital control and easy integration into automated RF test systems. With solid-state switching, the RFS-777 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-777 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	19 dB	50 dB
Input power (RF)	1 W (CW)	6 GHz	2.1 dB	16 dB	35 dB
Supply voltage	4 – 6 V	Insertion & return loss, and isolation are typical values.			
Supply current (max, +5 V)	10 mA				
Switching time	<50 μs				

CONTROL INTERFACE

HE14 8-pin

CONTROL TABLE

COM to · I²C data

Pin	Signal	I ² C data	RF1	RF2	RF3	RF4
1	+5 VDC	xxxxxx00	ON	OFF	OFF	OFF
2	A0	xxxxxx10	OFF	ON	OFF	OFF
3	SDA	xxxxxx11	OFF	OFF	ON	OFF
4	SCL	xxxxxx01	OFF	OFF	OFF	ON
5	A1					
6	GND					
7	A2					
8	GND					

MECHANICAL	ENVIRONMENTAL
Dimensions 49.05 × 82 × 10.3 mm (1.93 × 3.23 × 0.41 in)	Operating temperature 0 – 50 °C
Weight 25 g (0.88 oz)	Storage temperature -20 ... +70 °C
Compliance RoHS	Relative humidity 95 % at +40 °C

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