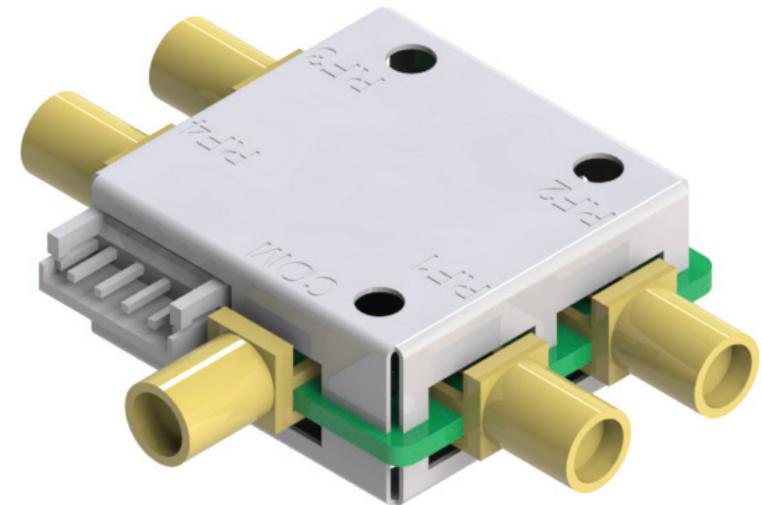


6GHz SP4T RF Switch I/O Controlled

TB1309

- Small size - minimal space required
- Broad frequency range (DC to 6GHz) - great performance over whole frequency range
- Low insertion loss - critical for systems that require low overall noise figure
- High isolation - reduces system measurement uncertainties
- High repeatability - Improved measurement accuracy: no random errors
- Operating life - no mechanical stress; long operating life reduces cost per cycle
- Internal terminations - no resonance in unused lines; 50 ohm load termination



APPLICATIONS

High performance RF switch for applications which require long operating life without risking RF performance, such as high volume testing.

RF CONNECTORS

SMA (f)

CONTROL INTERFACE

Supply and I/O
JST EH 4PIN (2.5 mm pitch)

| Pin | Signal |
|-----|--------|
| 1 | +12VDC |
| 2 | CTRL1 |
| 3 | CTRL2 |
| 4 | GND |

CONTACT INFO

sales@bluelec.com

RF AND DC SPECIFICATIONS

| | | |
|---------------------------|------------|--------|
| Operating frequency | DC - 6 GHz | |
| Impedance | 50 ohm | |
| Insertion loss (typ.) | 1 GHz | 1.0 dB |
| | 3 GHz | 1.5 dB |
| | 6 GHz | 1.8 dB |
| Return loss (typ.) | 1 GHz | 20 dB |
| | 3 GHz | 19 dB |
| | 6 GHz | 16 dB |
| Isolation (typ.) | 1 GHz | 60 dB |
| | 3 GHz | 50 dB |
| | 6 GHz | 35 dB |
| Input power (RF) | 1 | W (CW) |
| Supply voltage | 12 | V |
| Supply current max (+12V) | 10 | mA |
| Switching time | <25 | µs |

CONTROL TABLE

| I/O | | COM to | | | |
|-------|-------|--------|-----|-----|-----|
| CTRL1 | CTRL2 | RF1 | RF2 | RF3 | RF4 |
| 0V | 0V | ON | OFF | OFF | OFF |
| 0V | 12V | OFF | ON | OFF | OFF |
| 12V | 12V | OFF | OFF | ON | OFF |
| 12V | 0V | OFF | OFF | OFF | ON |

MECHANICAL SPECIFICATIONS

| | |
|------------|---|
| Dimensions | 39.5 x 51.1 x 12.7 mm (1.56"*2.01"*0.50") |
| Weight | 15 g (0.53 oz) |

ENVIRONMENTAL SPECIFICATIONS

| | |
|-----------------------|----------------|
| Operating temperature | 0-50 °C |
| Storage temperature | -20 ... +70 °C |
| Relative humidity | 95 % at +40 °C |

