

TERMINATED SP4T & SP6T 67 GHz COAXIAL SWITCH

V-Band Preferred Switch



APPLICATIONS

- 5G Telecom
- High Frequency Test & Measurement
- Satellite Communication

To meet the growing demands for V-Band applications, Radiall has completed its range of 67 GHz coaxial switches with terminated SP4T and SP6T models. Fitted with 1.85 mm connectors, these switches are compatible with Radiall's other 67 GHz products.

PART NUMBER SELECTION

R57 4 V

SERIES PREFIX

MODEL

- 3: Without 50 Ω termination
- 4: With 50 Ω termination

RF CONNECTORS

- V: DC up to 67 GHz

TYPE

- 0: Normally open
- 1: Normally open I. + C.
- 2: Latching
- 3: Latching + I.C.
- 4: Latching + S.C.O.^[1]
- 5: Latching + S.C.O. + I.C.^[1]
- 8: Latching + S.C.O. + A.R.^[1]
- 9: Latching + S.C.O. + I.C. + A.R.^[1]

ACTUATOR TERMINALS

- 0: Solder pins
- 5: D-Sub connector

OPTIONS

- 0: Without option
- 1: Positive common^[3]
- 2: Compatible TTL driver^[1 & 4]
- 3: With suppression diodes
- 4: With suppression diodes and positive common^[5]
- 8: BCD TTL driver compatible^[1, 2, 3 & 4]

NUMBER OF POSITIONS

- 4: 4 positions
- 6: 6 positions

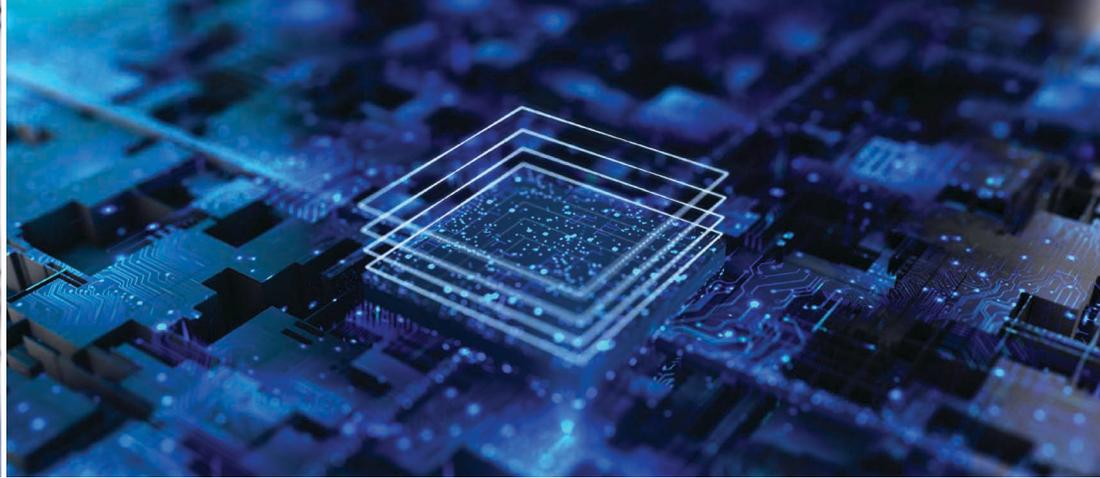
ACTUATOR VOLTAGE

- 2: 12 Vdc
- 3: 28 Vdc

Notes

I.C.: Indicator contact / S.C.O.: Self Cut-Off / A.R.: Auto Reset

1. These models are already equipped with suppression diodes
2. Latching BCD driver enables also a global reset through driver code 0000
3. This option is only available for type 0, 1, 2, 3 and for type 8 and 9 combined with 28 Volts
4. Polarity is not relevant to application for switches with TTL driver
5. Option is available only for type 0, 1, 2 and 3



All of SP4T and SP6T's RF paths have the same electrical length and insertion loss, enabling excellent RF performance up to 67 GHz.

| Operating Frequency (GHz) | DC - 6 | 6 - 12.4 | 12.4 - 18 | 18 - 26.5 | 26.5 - 40 | 40 - 50 | 50 - 65 | 65 - 67 |
|---|--------|----------|-----------|-----------|-----------|---------|---------|---------|
| V.S.W.R Max | 1.3 | 1.4 | 1.5 | 1.7 | 1.9 | 2.2 | 2.2 | 2.2 |
| Insertion Loss Max (dB) | 0.3 | 0.4 | 0.5 | 0.7 | 0.9 | 1.2 | 1.4 | 1.7 |
| Isolation Min (dB) | 70 | 60 | 60 | 55 | 50 | 50 | 50 | 50 |
| Average Power (W) <i>Nominal Voltage at 25 °C</i> | 40 | 30 | 25 | 15 | 5 | 3 | 1 | 1 |

FEATURES & BENEFITS

- Frequency: DC - 67 GHz
- Excellent RF performance
- Excellent IL repeatability
- Excellent cost to performances
- Life span: 2 million cycles
- Various options available
- Same electrical length and insertion loss for all RF paths