

Magvention MC3-S-U50 – 1P6T Switch DC-50 GHz

1P6T Coaxial Switch · 2.4mm, DC-50 GHz · Product Datasheet



RF PERFORMANCE BY BAND

Frequency Range	VSWR (max)	Insertion Loss (max)	Isolation (min)
DC – 6 GHz	1.3	0.2 dB	70 dB
6 – 12 GHz	1.3	0.3 dB	70 dB
12 – 18 GHz	1.4	0.4 dB	60 dB
18 – 26.5 GHz	1.7	0.7 dB	55 dB
26.5 – 32 GHz	1.9	0.8 dB	50 dB
32 – 50 GHz	2.0	1.2 dB	50 dB

TECHNICAL SPECIFICATIONS

- **Product Type**
1P6T Coaxial Switch, Normally Open
- **Frequency Range**
DC – 50 GHz
- **RF Connectors**
2.4 mm (U-type)
- **Impedance**
50 Ω
- **Switching Sequence**
Break-before-Make
- **Switching Time**
15 ms max
- **Contact Material**
Gold-plated
- **Operating Life**
1,000,000 cycles
- **Manufacturer**
Magvention
- **Control Interface**
15-pin D-sub male
- **Control Logic**
TTL (option), indicator (option)
- **Supply Voltage**
12 / 18 / 24 / 28 VDC
- **Current (Normally Open)**
300 / 210 / 170 / 150 mA
- **Height**
H = 52 mm max (62 mm with TTL/self-cutoff)
- **Weight**
approx. 190 g
- **Operating Temp.**
-25 to +65 °C standard
- **Operating Temp. (e-option)**
-55 to +85 °C
- **Vibration**
10G RMS, 20–2000 Hz

APPLICATIONS

mmWave ATE Automated test equipment up to 50 GHz with reliable RF routing	5G FR2 Test Validation of 24-50 GHz cellular infrastructure and devices	Antenna & Beamforming Channel selection in phased-array and antenna test setups
Satellite Communication Ka-, Q- and V-band SATCOM signal routing	RFIC Characterization Switching between DUTs and measurement instruments	Lab Bench Routing 1-to-6 RF distribution on millimeter-wave test benches