

Magvention MC5 – DPDT Transfer Switch DC-40 GHz

MC5-S (SMA) and MC5-K (2.92 mm) · Failsafe / Latching · Product Datasheet



FREQUENCY-DEPENDENT RF PERFORMANCE

Frequency Range	VSWR (max)	Insertion Loss (max)	Isolation (min)
DC – 6 GHz	1.20	0.20 dB	80 dB
6 – 12 GHz	1.30	0.25 dB	70 dB
12 – 18 GHz	1.35	0.40 dB	60 dB
18 – 26.5 GHz	1.70	0.90 dB	55 dB
26.5 – 40 GHz	2.00	1.30 dB	50 dB

TECHNICAL SPECIFICATIONS

- **Configuration**
DPDT (Transfer Switch)
- **Frequency Range**
DC – 40 GHz
- **Connectors**
4x SMA Female (MC5-S) / 4x K 2.92 mm (MC5-K)
- **Switching Sequence**
Break before Make
- **Switching Time**
15 ms max
- **Impedance**
50 Ω
- **Contact Material**
Plated Au
- **Life**
3,000,000 switching cycles
- **Supply Voltage**
12 / 18 / 24 / 28 VDC
- **Supply Current (Failsafe)**
380 / 280 / 200 / 180 mA
- **Operating Temp.**
-25 to +65 °C / -55 to +85 °C (e-option)
- **Vibration**
10 G RMS, 20 – 2000 Hz
- **Mechanical Shock**
50 G, 1/2 sine, 11 ms
- **Weight**
120 g

APPLICATIONS

<p>Automated Test Equipment (ATE) Tx/Rx path switching in VNA and production test systems up to 40 GHz</p>	<p>Satellite Communication Working/standby redundancy and antenna switching in Ku- and Ka-band</p>	<p>5G mmWave Test Front-end characterization and path switching across the Ka-band</p>
<p>Radar Systems Antenna sharing between pulsed Tx and receiver chain in airborne and ground radar</p>	<p>Defense & Aerospace Rugged mechanical specification for portable and embedded RF systems</p>	<p>Research & Development Flexible configuration switching in multi-path RF measurement setups</p>