

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8762B

The Keysight (Agilent HP) 8762B is a high-performance, single-pole double-throw (SPDT) coaxial switch operating from DC to 18 GHz. Designed for high isolation and low insertion loss, this terminated electromechanical switch features break-before-make RF contacts, an internal 50 Ω termination for the unused port, and automatic coil current interruption to minimize power consumption.

SPECIFICATIONS

Physical

Power Supply	5 Vdc / 15 Vdc / 24 Vdc (nominal, option dependent)
Operating Temperature	-25 to +75 °C °C

RF Performance Specifications

Frequency Range	DC to 18 GHz
Characteristic Impedance	50 Ω
Switch Configuration Type	Single-Pole Double-Throw (SPDT)
Internal Termination	50 Ω (on unused port)
Switching Type	Break-before-make
Insertion Loss (DC to 2 GHz)	< 0.25 dB
Insertion Loss (2 to 18 GHz)	< 0.5 dB
SWR (DC to 2 GHz)	< 1.15
SWR (2 to 12.4 GHz)	< 1.25
Maximum RF Input Power (Average)	1 W
Maximum RF Input Power (Peak)	100 W

Actuator & Drive Specifications

Coil Voltage Options	5 Vdc (Opt 011) / 15 Vdc (Opt 015) / 24 Vdc (Opt 024)
Current Interrupts / Coil Cutoff	Yes
Position Indication Capability	Yes

Physical & Mechanical Configuration

RF Connector Type	SMA (female)
Control Terminal Type	Solder terminals

Reliability & Life Cycle

Expected Mechanical Life	1,000,000 cycles
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RF Performance

Insertion Loss Repeatability	0.03 dB (maximum after 1,000,000 switchings)
Internal Termination Power Rating	1 W average, 100 W peak (10 μs pulse width max)

Environmental

Non-Operating Shock	500 g, 0.5 ms, 3 axes
Operating Altitude	4570 m (15,000 ft)
Storage Altitude	15240 m (50,000 ft)

Power & Control

Coil Voltage (Option 015)	15 VDC (12 to 20 VDC)
Coil Resistance (Option 015)	133 Ω
Coil Current (Option 015)	113 mA

TECHNOLOGY

Electromechanical Coaxial Switch

APPLICATIONS

RF and Microwave Signal Routing

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.