

## KEYSIGHT TECHNOLOGIES (AGILENT HP)

# 8762C

The Keysight 8762C (formerly Agilent) is a high-performance electromechanical single-pole double-throw (SPDT) coaxial switch operating from DC to 26.5 GHz. It features an integrated 50 ohm termination for the unused port, exceptional isolation, low insertion loss, and outstanding repeatability over a long lifecycle, making it ideal for precision RF and microwave routing applications.

## SPECIFICATIONS

### Physical

|                       |                                            |
|-----------------------|--------------------------------------------|
| Power Supply          | 5 Vdc / 15 Vdc / 24 Vdc (option dependent) |
| Operating Temperature | -20 to +75 °C °C                           |
| Dimensions (W×H×D)    | 52.3 mm × 46.7 mm × 20.6 mm mm             |

### RF Performance

|                                 |                |
|---------------------------------|----------------|
| Frequency Range                 | DC to 26.5 GHz |
| Nominal Impedance               | 50 Ω           |
| Unused Port Termination         | 50 Ω           |
| Insertion Loss (DC to 2 GHz)    | < 0.2 dB       |
| Insertion Loss (2 to 18 GHz)    | < 0.5 dB       |
| Insertion Loss (18 to 26.5 GHz) | < 1.25 dB      |
| Isolation (DC to 18 GHz)        | > 90 dB        |
| Isolation (18 to 26.5 GHz)      | > 50 dB        |
| Maximum SWR                     | 1.8            |
| Average RF Input Power (CW)     | 1 W            |
| Peak RF Input Power             | 100 W          |

### Switching & Actuation Characteristics

|                                   |                   |
|-----------------------------------|-------------------|
| Switch Configuration              | SPDT (Terminated) |
| Switching Speed / Transition Time | 30 ms             |
| Switching Life Cycle Rating       | 1,000,000 cycles  |

### Electrical Control & Drive

|                                |          |
|--------------------------------|----------|
| Current Interrupts             | Standard |
| Position Indication Capability | Yes      |

### Physical & Mechanical

|              |               |
|--------------|---------------|
| RF Connector | 3.5 mm female |
|--------------|---------------|

**Power & Solenoid Drive**

|                               |                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------|
| Solenoid Voltage Options      | 5 VDC (Option 011) / 15 VDC (Option 015) / 24 VDC (Option 024)                  |
| Solenoid Current              | 300 mA (Option 011) / 160 mA (Option 015) / 120 mA (Option 024)                 |
| Coil Impedance                | 17 $\Omega$ (Option 011) / 95 $\Omega$ (Option 015) / 200 $\Omega$ (Option 024) |
| Minimum Switching Pulse Width | 15 ms                                                                           |

**Environmental**

|                           |                                                                     |
|---------------------------|---------------------------------------------------------------------|
| Storage Temperature Range | -55 to +85 °C                                                       |
| Humidity resistance       | 95% RH at 40 °C for 5 days                                          |
| Vibration Resistance      | 0.05 inches double amplitude, 10 to 55 Hz; 10 g peak, 55 to 2000 Hz |
| Shock Resistance          | 50 g, 11 ms                                                         |

**Performance**

|                              |                                            |
|------------------------------|--------------------------------------------|
| Insertion Loss Repeatability | 0.03 dB maximum to 1,000,000 cycles        |
| Switching Type               | Break-before-make                          |
| Solenoid Latching            | Latching, with automatic current interrupt |

**TECHNOLOGY**

Electromechanical Coaxial Switch

**APPLICATIONS**

RF & 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.