

# FMS2KH

## DC~43.5GHz, SPDT

### Features:

- \* Low VSWR
- \* Low Insertion Loss
- \* High Isolation

### Applications:

- \* Wireless
- \* Transmitter
- \* Laboratory Test
- \* Radar

### Electrical

Frequency: DC~43.5GHz  
Impedance: 50Ω

| Model       | Frequency range (GHz) | Insertion Loss (dB) | Isolation (dB) | VSWR |
|-------------|-----------------------|---------------------|----------------|------|
| FMS2KH-40   | DC-26.5               | 0.40                | 75             | 1.3  |
|             | 26.5-40               | 0.65                | 70             | 1.5  |
| FMS2KH-43.5 | DC-40                 | 0.40                | 75             | 1.3  |
|             | 40-43.5               | 1.00                | 60             | 1.6  |

|               |              |     |     |
|---------------|--------------|-----|-----|
| Voltage *1(V) | +12          | +24 | +28 |
| Current (mA)  | Failsafe 195 | 100 | 95  |
|               | Latching 230 | 140 | 120 |

[1] The voltage can be selected according to user requirements.

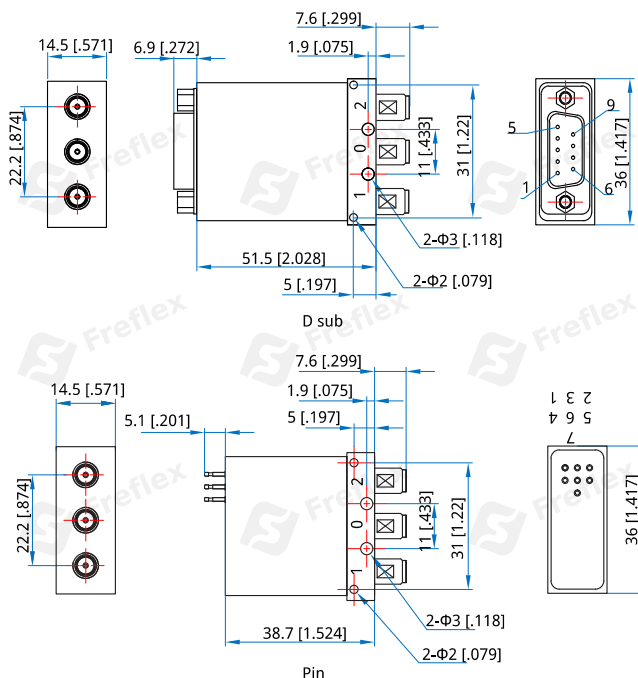
### Mechanical

|                                              |                                       |
|----------------------------------------------|---------------------------------------|
| Switching Sequence:                          | Break before Make                     |
| Switching Time:                              | 15mS max.                             |
| Operation Life:                              | 2M Cycles                             |
| Vibration (operating):                       | 20-2000Hz, 10G RMS                    |
| Mechanical Shock (non-operating):            | 30G, 1/2sine, 11mS                    |
| RF Connectors:                               | 2.92mm Female                         |
| Power Supply & Control Interface Connectors: | Feed Through/Terminal Post or D-Sub 9 |

### Environmental

|                       |           |
|-----------------------|-----------|
| Temperature:          | -25~+65°C |
| Extended Temperature: | -45~+85°C |

### Outline Drawings



Unit: mm [in]  
Tolerance: ±0.5mm [±0.00in]

### Additional Options

TTL: T  
Indicators: I  
Extended Temperature: Z  
Positive Common  
Waterproof Sealing Type

### How To Order

#### FMS2KH-F-WXYZ

F: Frequency in GHz  
W: Actuator Type. Failsafe: 0, Latching: 1.  
X: Voltage. +12V: E, +24V: K, +28V: M.  
Y: Power Interface. Pin: 0, D-Sub: 1.  
Z: Additional Options.

## Examples:

To order a SPDT switch, High performance, DC-40GHz, Failsafe, +12V, D-Sub, TTL, Indicators, specify FMS2KH-40-0E1TI.

Customization is available upon request.

## Pin Numbering

### Failsafe

| Pin | Function        | Pin | Function        |
|-----|-----------------|-----|-----------------|
| 1   | VDC(RF: 0 to 2) | 4~5 | Indicator (1~2) |
| 2   | NC              | 6   | Indicator (COM) |
| 3   | COM(RF: 0 to 2) | 7~9 | NC              |

### Failsafe&TTL

| Pin | Function        | Pin | Function        |
|-----|-----------------|-----|-----------------|
| 1   | VDC(RF: 0 to 2) | 4~5 | Indicator (1~2) |
| 2   | A1(RF: 0 to 2)  | 6   | Indicator (COM) |
| 3   | COM(RF: 0 to 2) | 7~9 | NC              |

### Latching

| Pin | Function       | Pin | Function        |
|-----|----------------|-----|-----------------|
| 1   | V1(RF: 0 to 1) | 4~5 | Indicator (1~2) |
| 2   | V2(RF: 0 to 2) | 6   | Indicator (COM) |
| 3   | COM            | 7~9 | NC              |

### Latching&TTL

| Pin | Function       | Pin | Function        |
|-----|----------------|-----|-----------------|
| 1   | VDC            | 5~6 | Indicator (1~2) |
| 2   | A1(RF: 0 to 1) | 7   | Indicator (COM) |
| 3   | COM            | 8~9 | NC              |
| 4   | A2(RF: 0 to 2) |     |                 |

## Driving Schematic Diagram

