

# FMS2E

## DC~6GHz, SPDT

### Features:

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

### Applications:

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

### Electrical

Frequency: DC~6GHz  
Impedance: 50Ω

| Frequency range (GHz) | Insertion Loss (dB) | Isolation (dB) | VSWR |
|-----------------------|---------------------|----------------|------|
| DC~2                  | 0.2                 | 70             | 1.15 |
| 2~4                   | 0.3                 | 60             | 1.30 |
| 4~6                   | 0.5                 | 60             | 1.50 |

|               |              |     |     |     |
|---------------|--------------|-----|-----|-----|
| Voltage*1 (V) | +12          | +18 | +24 | +28 |
| Current (mA)  | Failsafe 275 | 170 | 130 | 115 |
|               | Latching 100 | 80  | 70  | 60  |

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

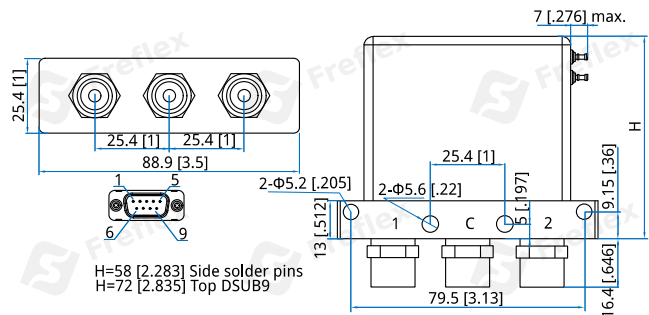
### Mechanical

|                                   |                            |
|-----------------------------------|----------------------------|
| Switching Sequence:               | Break before Make          |
| Switching Time:                   | 15mS max.                  |
| Operation Life:                   | 1M Cycles                  |
| Vibration (operating):            | 20-2000Hz, 10G RMS         |
| Mechanical Shock (non-operating): | 50G, 1/2Sine, 11mS         |
| RF Connectors:                    | SC Female                  |
| Relative Humidity :               | 5 to 85%                   |
| Power Supply & Control            | Feed Through/Terminal Post |
| Interface Connectors:             | or D-Sub 9                 |

### Environmental

|                            |           |
|----------------------------|-----------|
| Operating Temperature:     | -25~+65°C |
| Extended Temperature:      | -55~+85°C |
| Non-operating Temperature: | -55~+70°C |

### Outline Drawings



Unit: mm [in]

Tolerance: ±0.5mm [±0.02in]

### Additional Options

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

### How To Order

#### FMS2E-F-WXYZ

F: Frequency in GHz

W: Actuator Type. Failsafe: 0, Latching: 1.

X: Voltage. +12V: E, +18V: H, +24V: K, +28V: M.

Y: Power Interface. Pin: 0, D-Sub: 1.

Z: Additional Options.

#### Examples:

To order a SPDT switch, DC-6GHz, Failsafe, +12V, Pin, TTL, Indicators, specify FMS2E-6-0E0TI.

Customization is available upon request.

## Pin Numbering

### Failsafe

| Pin   | Function       | Pin | Function        |
|-------|----------------|-----|-----------------|
| 1     | V1(RF: 0 to 1) | 5~6 | Indicator (1~2) |
| 2/4/8 | NC             | 7   | Indicator (COM) |
| 3     | COM            | 9   | VDC             |

### Failsafe&TTL

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

### Latching

| Pin | Function       | Pin | Function        |
|-----|----------------|-----|-----------------|
| 1   | V1(RF: 0 to 1) | 5~6 | Indicator (1~2) |
| 2   | V2(RF: 0 to 2) | 7   | Indicator (COM) |
| 3   | COM            | 9   | VDC             |
| 4/8 | NC             |     |                 |

### Latching&TTL

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

## Driving Schematic Diagram

