

## NMS8K

DC~40GHz, SP7T~SP8T

### Features:

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

### Applications:

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

### Electrical

Frequency: DC~40GHz  
Impedance: 50Ω

| Frequency range (GHz) | Insertion Loss (dB) | Isolation (dB) | VSWR |
|-----------------------|---------------------|----------------|------|
| DC~12                 | 0.5                 | 70             | 1.4  |
| 12~18                 | 0.6                 | 60             | 1.5  |
| 18~26.5               | 0.8                 | 55             | 1.7  |
| 26.5~40               | 1.1                 | 50             | 2.0  |

|                            |     |     |     |
|----------------------------|-----|-----|-----|
| Voltage (V)                | +12 | +24 | +28 |
| Current (mA) Normally Open | 300 | 150 | 140 |

### Mechanical

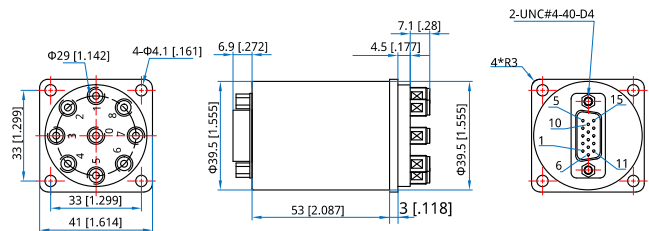
|                                              |                                   |
|----------------------------------------------|-----------------------------------|
| Size*1:                                      | 41*41*53mm<br>1.614*1.614*2.087in |
| Switching Sequence:                          | 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: | D-Sub 15 Male/D-Sub 26 Male       |
| Mounting:                                    | 4-Φ4.1mm through-hole             |

[1] Exclude connectors.

### Environmental

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

**NMSVK-F-WXYZ**

V: 7~8 (SP7T~SP8T)

F: Frequency in GHz

W: Actuator Type. Normally Open: 3.

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

Y: Power Interface. D-Sub: 1.

Z: Additional Options.

### Examples:

To order a SP8T switch, DC-40GHz, Normally Open, +12V, D-Sub, TTL, Indicators, specify NMS8K-40-3E1TI.

Customization is available upon request.

## Pin Numbering

### Normally Open

| Pin   | Function        | Pin   | Function        |
|-------|-----------------|-------|-----------------|
| 1~8   | V1~V8           | 18    | Indicator (COM) |
| 9     | COM             | 19    | VDC             |
| 10~17 | Indicator (1~8) | 20~26 | NC              |

### Normally Open & TTL

| Pin | Function | Pin   | Function        |
|-----|----------|-------|-----------------|
| 1~8 | A1~A8    | 11~18 | Indicator (1~8) |
| 9   | VDC      | 19    | Indicator (COM) |
| 10  | COM      | 20~25 | NC              |

## Driving Schematic Diagram

