

NMSD3K

DC~40GHz, 2P3T

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-6 | 0.3 | 70 | 1.3 |
| 6-12 | 0.4 | 60 | 1.4 |
| 12-18 | 0.5 | 55 | 1.5 |
| 18-26.5 | 0.6 | 50 | 1.6 |
| 26.5~32 | 0.7 | 50 | 1.7 |
| 32~40 | 0.9 | 50 | 1.9 |

| Voltage*1 (V) | 12 | 24 | 28 |
|---------------|-----|-----|-----|
| Current (mA) | 350 | 200 | 180 |
| | 400 | 200 | 185 |

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

Mechanical

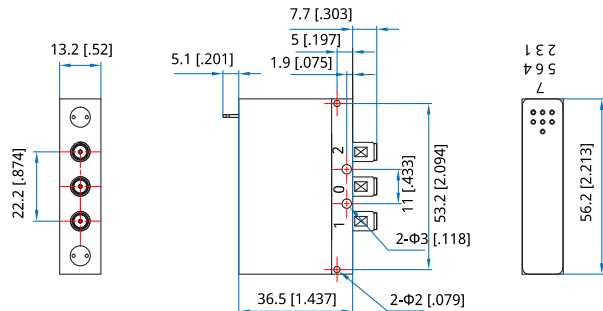
| | |
|--|--|
| Size*2: | 36.5*53.2*13.2mm 1.437*2.094*0.52in |
| Switching Sequence: | Break before Make |
| Switching Time: | 15mS max. |
| Operation Life: | 2M Cycles |
| Vibration (operating): | 20-2000Hz, 10G RMS |
| Mechanical Shock (non-operating): | 30G, 1/2sine, 11mS |
| RF Connectors: | 2.92mm Female |
| Power Supply & Control Interface Connectors: | Feed Through/Terminal Post |
| Mounting: | 2-Φ3mm through-hole 2-Φ2mm through-hole |

[2] 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

NMSD3K-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
 Z: Additional Options.

Examples:

To order a 2P3T switch, DC-40GHz, Failsafe, +12V, D-Sub, TTL, Indicators, specify NMSD3K-40-0E1TI.

Customization is available upon request.

Pin Numbering

Failsafe

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

Failsafe&TTL

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

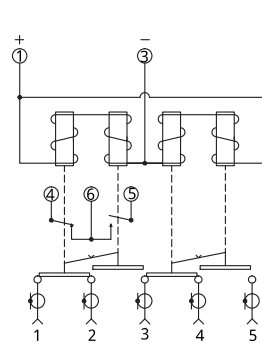
Latching

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

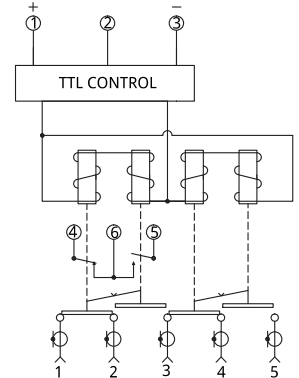
Latching&TTL

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

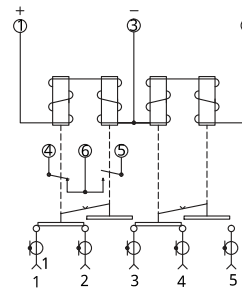
Driving Schematic Diagram



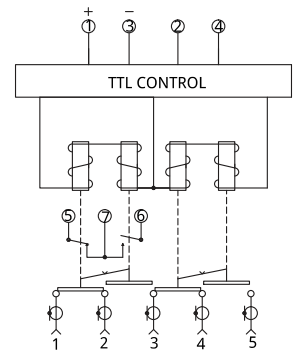
Failsafe



Failsafe+TTL



Latching



Latching+TTL