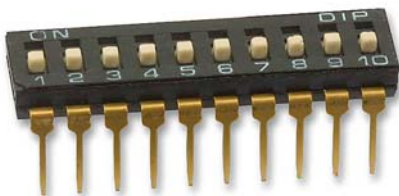
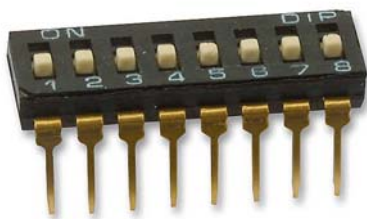
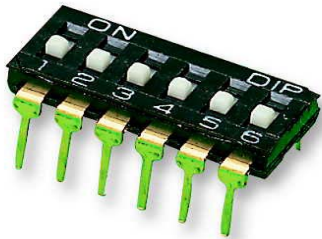
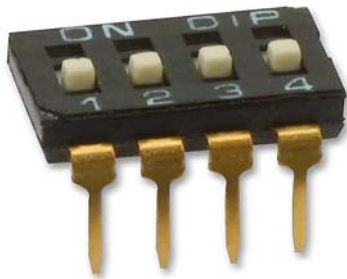
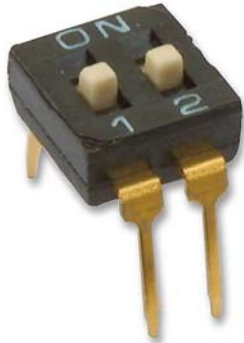


# MCNDI Series

## DIL Switches



### NDI



### Features:

- Single pole single throw DIL switches.
- Splay terminals allow for automatic insertion by IC insertion machine.
- Insert moulding of terminals and ultrasonic welding improve flux proofness and enable flux washing in whole by top tape sealing.
- NDI series (raised actuator) available for different purposes.
- Double contacts offers high reliability.
- Vapour phase solderable, IR-reflow solderable.
- Terminal plating by gold give excellent results when soldering.

Terminal plating : Tin/lead available too.  
Lead Spacing : 7.62 x 2.54.

### Materials:

Base and cover : High temperature thermoplastic.  
Colour : Black.  
Actuator : Nylon thermoplastic.  
Colour : White.  
Contact : Alloy copper.  
Contact plating : Gold plated over nickel.  
Terminal plating : Gold. (or Tin/Lead available).  
Tape plating : Kapton.  
Life expectancy : 2000ops.

It is recommended to solder switches in the 'off' factory supplied position.

### Specifications:

#### Mechanical:

Mechanical life : 2000 operations per switch.  
Operation force : 1000gf maximum.  
Operating temperature : -20°C to +85°C.  
Storage temperature : -40°C to +85°C.  
Vibration test : MIL-STD-202F Method 201A.  
Frequency : 10 - 55 - 10Hz/1 minute.  
Directions : X, Y, Z three mutually perpendicular directions.  
Time : 2 hours each direction.  
High reliability.  
Shock test : MIL-STD-202F Method 213B.  
Condition A.  
Gravity : 50G (peak value), 11 milliseconds.  
Direction and times : 6 sides and 3 times in each direction.  
High reliability.



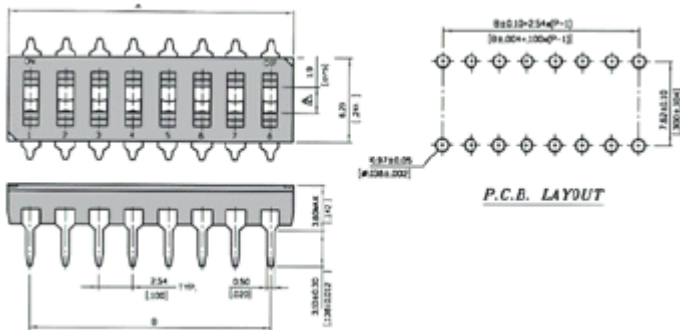
# MCNDI Series

## DIL Switches



### Dimensions

#### NDI



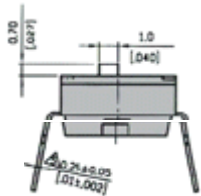
#### Schematic (Typical)



02, 04, 06, 08 and 10 position available

#### Terminal Type

##### NDI- S



#### Specifications:

##### Electrical:

- Electrical life : 2000 operations minimum per switch 24V dc, 25mA.
- Non-switching rating : 100mA, 50V dc.
- Switching rating : 25mA 24V dc.
- Contact resistance : [a] 50m $\Omega$  maximum at initial.  
[b] 100m $\Omega$  maximum after life test.
- Capacitance : 5pF maximum.
- Operating temperature : -20°C to +70°C.
- Insulation resistance : 100M $\Omega$  minimum at 500V dc.
- Dielectric strength : 500V ac per 1 minute.
- Capacitance : 5pF maximum
- Circuit : Single pole single throw.

#### Soldering and Cleaning Process:

##### For best results, please follow these recommendation:

Keep all switch contacts in their "OFF" position for all operations.

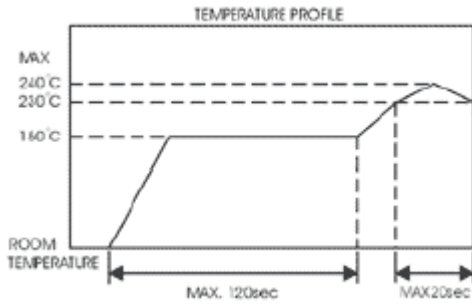
Wave soldering : Recommended solder temperature at 500°F (260°C) maximum, 5 seconds. For through hole type.

Hand soldering : Use a soldering iron of 30 watts, controlled at 608°F (320°C) approximately 2 seconds while applying solder.



# MCNDI Series

## DIL Switches



Reflow temperature profile.

Care should be exercised so that flux from the upper part of the printed circuit board does not adhere to the switch.

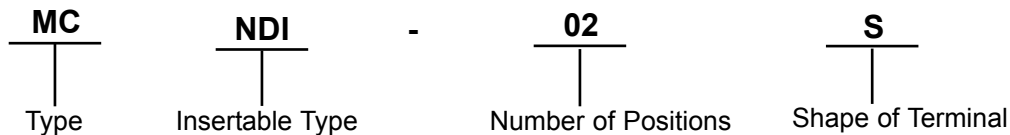
Do not clean the switch body except with top tape sealed type, which can only spray of cleaning method from top s/w.

### Specifications Table

Number of Positions	Dimension A	Dimension B	Part Number
02	6.02 (0.237)	2.54 (0.100)	MCNDI-02S
04	11.10 (0.437)	7.62 (0.300)	MCNDI-04S
06	16.18 (0.637)	12.70 (0.500)	MCNDI-06S
08	21.26 (0.837)	17.78 (0.700)	MCNDI-08S
10	26.34 (1.037)	22.86 (0.900)	MCNDI-10S

Dimensions : Millimetres (Inches)

### Part Number Explanation



**Insertable Type** : NDI = Machine insertable Type DIP switch.

**Number of Positions** : 02, 04, 06, 08 and 10.

**Shape of Terminal** : S = Splay Terminal.

# MCNDI Series

## DIL Switches



### Notes:

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