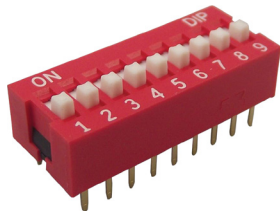


DIP Switch

Slide Type



Application:

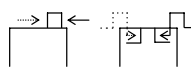
- Industrial Control
- Computer and Peripherals
- Variety of Function Controls

**RoHS
Compliant**

Specifications:

- Actuator : Thermoplastic PBT UL 94V-0 – White
- Cover : Thermoplastic PBT UL 94V-0 – Red
- Contact : Copper Alloy, Gold Plated
- Terminal : Brass, Gold Plated
- Base : Thermoplastic PA66 UL 94V-0 - Black
- Contact Rating : Non-Switching: 100mA, 50V DC
Switching: 25mA, 24V DC
- Contact Resistance : 50mΩ max.
- Insulation Resistance : 100MΩ min. 500V DC
- Dielectric Strength : 500V AC/1 minute
- Operating Force : 1000gf max. (9.8N max.)
- Travel : 2mm
- Operating Life : 2000 cycles
- Operating Temperature : -40°C to +85°C
- Storage Temperature : -40°C to +85°C
- Shelf Life : 6 Months

Test Sequence

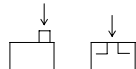
Properties	Item	Description	Test Conditions	Requirements
Electric Performance	1	Visual Examination	By visual examination check without any out pressure & testing.	There shall be no defects that affect the serviceability of the product.
	2	Contact Resistance	1. To be measured between the two terminals associated with each switch pole. 2. Measurements shall be made with a 1kHz shall current contact resistance meter.	50mΩ Max.(initial)
	3	Insulation Resistance	500V DC, 1 minute ± 5 sec.	100MΩ Min.
	4	Dielectric withstanding Voltage	500V AC(50Hz or 60Hz) shall be applied between all the adjacent terminals and between the terminal and the frame for 1 minute.	There shall be no breakdown or flashover
	5	Capacitance	1 MHz ±10kHz	5pF Max.
Mechanical Performance	6	Operation Force	Applied in the direction of operation. ON→OFF OFF→ON 	1000gf Max (9.8N Max)



DIP Switch

Slide Type



Properties	Item	Description	Test Conditions	Requirements	
Mechanical Performance	7	Stop Strength	<p>A static load of 1 kgf(9.8N) is applied in the operating direction and pulling direction operated for a period of 15 seconds.</p> <p>A static load of 5 kgf (49N) to apply on stem top position for a period of 15 seconds.</p> 	<p>There shall be no sign of damage mechanically</p> <p>There shall be no sign of electrical function out of order or damage</p>	
	8	Soldering Heat Resistance	Soldering Temperature:	As shown in item 2~6	
			TEMP		TIME
			260°C ±5°C		5 ±1 sec.
	(PCB is 1.6mm in thickness.)				
	9	Vibration	<p>Shall be vibrated in accordance with Method 201A of MIL-STD-202F</p> <ol style="list-style-type: none"> Frequency: 10-55-10 Hz 1 min/cycle. Direction: 3 vertical directions including the direction of operation. Test Time: 2 hours each direction. 	As shown in item 2~6	
10	Shock	<p>Shall be shocked in accordance with Method 213B condition A of MIL-STD-202F</p> <ol style="list-style-type: none"> Acceleration: 50G. Action Time : 11 ± 1 m sec. Testing Direction: 6 sides. Test cycle : 3 times in each direction) 	As shown in item 2~6		
11	Solderability	<ol style="list-style-type: none"> NDS(R)-V Soldering Temperature:245 ±3°C Lead-Free solder : M705E JIS Z 3282 Class A (Tin 96.5%, Silver 3%, Copper 0.5%) Flux: 5-10 seconds. Duration of solder Immersion: 5 ±1 sec. 	No anti-soldering and the coverage of dipping into solder must more than 75% was requested.		
Durability	12	Operation Life	<p>Measurements shall be made following the test set forth below:</p> <ol style="list-style-type: none"> 25mA, 24V DC resistive load Rate of Operation: 15~20 cycles/ minute Cycle of Operation: 2000 cycles. 	<ol style="list-style-type: none"> As shown in item 3,4 Contact Resistance: 100mΩ Max. (Final-after test) 	
Weather Proof	13	Resistance Low Temperature	<p>Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made:</p> <ol style="list-style-type: none"> Temperature : -40°C ±3°C. Time: 96 hours 	As shown in item 2~6	
	14	Resistance High Temperature	<p>Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made :</p> <ol style="list-style-type: none"> Temperature : 85°C ±2°C. Time: 96 hours 	<ol style="list-style-type: none"> As shown in item 3~6 Contact Resistance: 100mΩ Max. 	
	15	Humidity Resistance	<p>Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made :</p> <ol style="list-style-type: none"> Temperature : 40°C ±2°C Relative Humidity :90~95% Time: 96 hours 	<ol style="list-style-type: none"> As shown in item 4,6 Contact Resistance: 100mΩ Max. Insulation Resistance: 10MΩ Min. 	

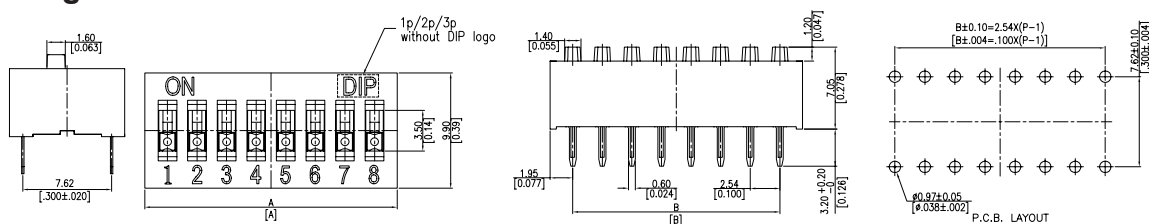
DIP Switch Slide Type



Soldering Conditions

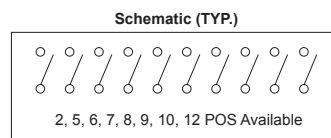
Manual Soldering	
Soldering Temperature	Max.350°C
Continuous Soldering Time	Max. 5 seconds

Diagram



Part Number	No. of Pos.	"A" mm (Inches)	"B" mm (Inches)
MCNDS-02V	2	6.44 (0.254)	2.54 (0.1)
MCNDS-03V	3	8.98 (0.354)	5.08 (0.2)
MCNDS-04V	4	11.52 (0.454)	7.62 (0.3)
MCNDS-05V	5	14.06 (0.554)	10.16 (0.4)
MCNDS-06V	6	16.6 (0.654)	12.7 (0.5)
MCNDS-07V	7	19.14 (0.754)	15.24 (0.6)
MCNDS-08V	8	21.68 (0.854)	17.78 (0.7)
MCNDS-09V	9	24.22 (0.954)	20.32 (0.8)
MCNDS-10V	10	26.76 (1.054)	22.86 (0.9)
MCNDS-12V	12	31.84 (1.254)	27.94 (1.1)

Dimensions : Millimetres



Tolerances: 10mm Over ±0.2mm
10mm Below ±0.1mm

Part Number Table

Description	Part Number
DIP Switch, Slide Type, 2Pos, SPST-NO, Raised Actuator, Red, TH	MCNDS-02V
DIP Switch, Slide Type, 3Pos, SPST-NO, Raised Actuator, Red, TH	MCNDS-03V
DIP Switch, Slide Type, 4Pos, SPST-NO, Raised Actuator, Red, TH	MCNDS-04V
DIP Switch, Slide Type, 5Pos, SPST-NO, Raised Actuator, Red, TH	MCNDS-05V
DIP Switch, Slide Type, 6Pos, SPST-NO, Raised Actuator, Red, TH	MCNDS-06V
DIP Switch, Slide Type, 7Pos, SPST-NO, Raised Actuator, Red, TH	MCNDS-07V
DIP Switch, Slide Type, 8Pos, SPST-NO, Raised Actuator, Red, TH	MCNDS-08V
DIP Switch, Slide Type, 9Pos, SPST-NO, Raised Actuator, Red, TH	MCNDS-09V
DIP Switch, Slide Type, 10Pos, SPST-NO, Raised Actuator, Red, TH	MCNDS-10V
DIP Switch, Slide Type, 12Pos, SPST-NO, Raised Actuator, Red, TH	MCNDS-12V

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell Limited 2016.

www.element14.com
www.farnell.com
www.newark.com

