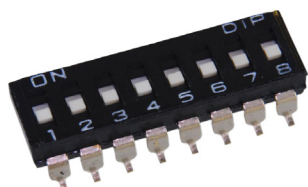


DIP Switch

Low Profile



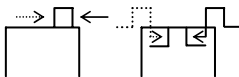
Description

These are mainly used as signal switch of electric devices, with the general requirements of mechanical and electrical characteristics.

Characteristics

Non-Switching : 100mA, 50V DC
 Switching : 25mA, 24V DC
 Operating Temp. : -40°C to +85°C
 Storage Temp. : -40°C to +85°C
 The shelf life of product is within 6 months.
 Type of Actuation : Actuated by sliding

Test Sequence

Characteristics	Description	Test Conditions	Requirements						
Electric Performance	Visual Examination	By visual examination check without any out pressure and testing.	There shall be no defects that affect the serviceability of the product.						
	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)						
	Insulation Resistance	500V DC, 1 minute ±5 sec.	100MΩ min						
	Dielectric withstanding Voltage	500V AC (50Hz or 60 Hz) shall be applied between all the adjacent terminals and between the terminal and the frame for 1 minute. Cutt off Current : 0.5mA Max.	There shall be no breakdown or flashover.						
	Capacitance	1 Mhz ±10kHz	5 pF Max.						
Mechanical Performance	Operation Force	Applied in the direction of operation. ON→OFF OFF→ON 	1,000 gf max (9.8N Max.)						
	Stop Strength	A static load of 1 kgf is applied in the operating direction and pulling direction operated for period of 15 seconds	There shall be no sign of damage mechanically.						
	Soldering Heat Resistance	<table border="1"> <tr> <td colspan="2">Soldering Temperature:</td> </tr> <tr> <td>Prod Series</td> <td>SMT Type Terminal DHA</td> </tr> <tr> <td>TEMP</td> <td rowspan="2">See the Temperature profile</td> </tr> <tr> <td>TIME</td> </tr> </table> <p>1. Duration of Solder Immersion: 5±1seconds. 2. Frequency of Solder Process: 1 time max. (PCB is 1.6 mm in thickness.)</p>	Soldering Temperature:		Prod Series	SMT Type Terminal DHA	TEMP	See the Temperature profile	TIME
Soldering Temperature:									
Prod Series	SMT Type Terminal DHA								
TEMP	See the Temperature profile								
TIME									



DIP Switch

Low Profile



Characteristics	Description	Test Conditions	Requirements
Mechanical Performance	Vibration	Shall be vibrated in accordance with Method 201A of MIL-STD-202F 1. Frequency: 10-55-10 Hz 1 min/cycle. 2. Direction: 3 vertical directions including the direction of operation. 3. Test Time: 2 hours each direction.	As shown in item 2~6
	Shock	Shall be shocked in accordance with Method 213B Condition A of MIL-STD-202F 1. Acceleration: 50G 2. Action Time: 11±1 m seconds 3. Testing Direction: 6 sides 4. Test cycle: 3 times in each direction	As shown in item 2~6
	Solderability	Through hole type 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 : 3 ±0.5sec. SMT type	No anti-soldering and the coverage of dipping into solder must more than 75% was requested
Durability	Operation Life	Measurements shall be made following the test set forth below: 1. 25mA, 24 V DC resistive load 2. Rate of Operation: 15~20 cycles/minute 3. Cycle of Operation: 2000 cycles	1. As shown in item 3 & 4 2. Contact Resistance: 100Ω max. (final-after test)
Weather-Proof	Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1. Temperature: -40 ±3°C 2. Time: 96 hours	As shown in item 2~6
	Resistance High Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1. Temperature: 85 ±2°C 2. Time: 96 hours	As shown in item 2~6 Contact Resistance: 100Ω max.
	Resistance Humidity	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1. Temperature : 40 ±2°C 2. Relative Humidity: 90~95% 3. Time: 96 hours	As shown in item 2~6 Contact Resistance: 100Ω max. Insulation Resistance: 10MΩ max.

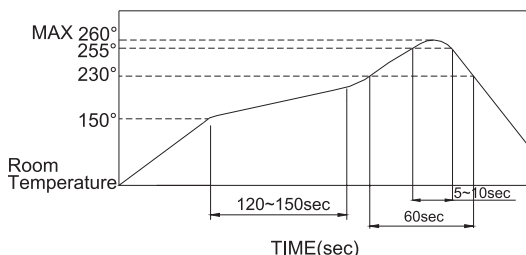
DIP Switch

Low Profile



Soldering Conditions

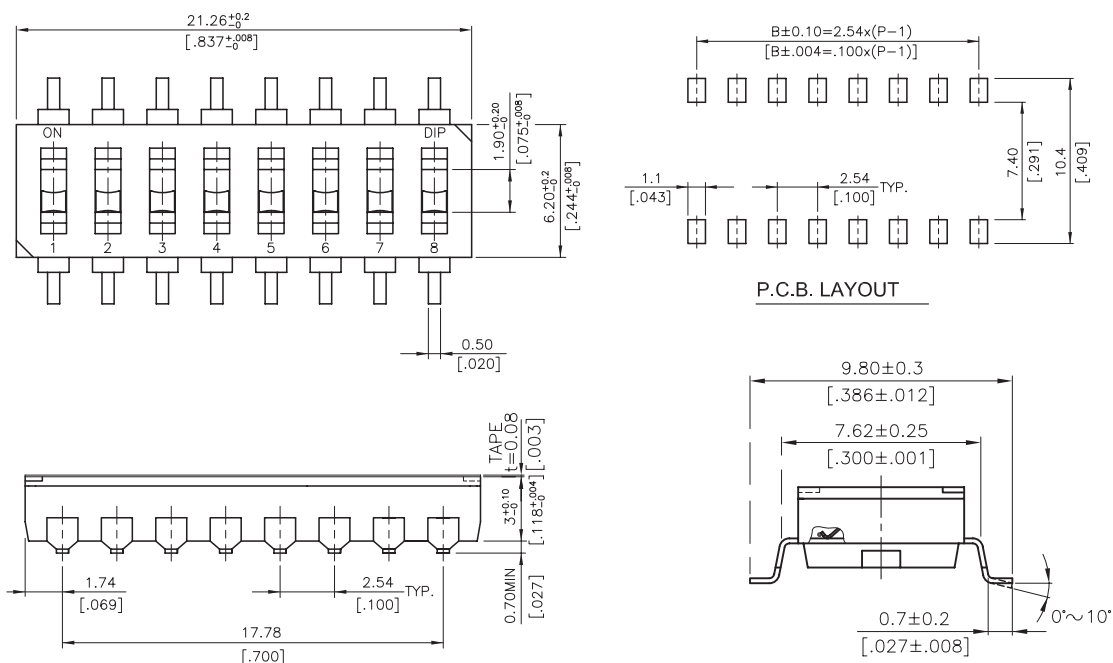
Condition for Soldering



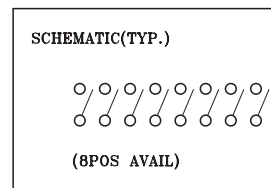
Manual Soldering	
Soldering Temperature	350°C Max.
Continuous Soldering Time	5 seconds Max.

The condition mentioned above is the temperature on the Cu foil of the PCB surface. There are cases where board's temperature greatly differs from switch's surface temperature depending on board's material, size, thickness, etc. Care, therefore, should be used not to allow switch's surface temperature to exceed 260°C.

Diagram



Part Number	No of Position
MCDM(R)-08-T	8



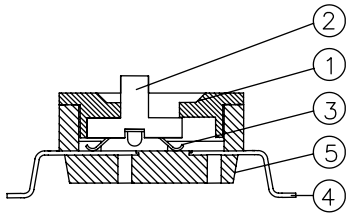
Dimensions : Millimetres (Inches)

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



DIP Switch

Low Profile



Item	Description.	Materials	Treatment	Qty.
1.	Cover	High – Temp. Thermoplastic PPS UL 94V-0	Molded Black	1
2.	Actuator	Thermoplastic Nylon UL 94V-0	Molded White	
3.	Contact	Alloy Copper	Gold plated at contact area	
4.	Terminal	Brass	Gold plated at contact area, tin/lead at termination area	
5.	Base	Thermoplastic PPS UL 94V-0	Molded Black	1

Part Number Table

Description	Part Number
8 Circuits, SPST, SMD, DM Series, DIP Sealed, 24 VDC	MCDM(R)-08-T

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.

