GLOSSARY
DIP SWITCHES

● **Stopper strength   mN·m**

This shows the mechanical strength of the stops employed to limit the rotation of the rotor. A designated torque is applied to the switch axis, etc., and the strength is measured.

● **Rotational torque   mN·m**

This shows the operating force required to turn the rotor of a rotary type switch.

● **Switching timing**

Timing is either shorting or non-shorting.

Shorting: In this case, when switching contacts on the same circuit, the second connection is made before the previously connected terminal is electrically disconnected, after which the circuit completely switches over to the correct position.

Non-shorting: This case differs from shorting in that during the switch over, ② is completely electrically disconnected from ① and ③ , after which ② and ③ are connected at the new connection location.
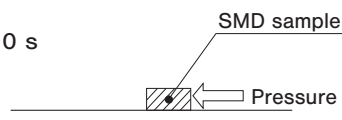
● **Click (detent)**

The method whereby the set position is checked in a sensory manner.

● **Shear (Adhesion)**

This test is to evaluate if any damages like electrode stripping, breaks, or cracks occur on SMD component soldered to the printed circuit board due to stress from the flank.

Pressure: 5 N

Holding time: 10 s

GLOSSARY
DIP SWITCHES

● **Contact**

① A contact occurs when two insulated conductors touch each other.

② A contact is the small touching area between two conductors. In a switch, this is the conductive metal connection that controls the opening and closing of the electric circuit.

● **Operating force　N**

This is the maximum force when sliding a knob.

● **Contact resistance　[mΩ]**

This is the electrical resistance that occurs between contact points when a switch is closed.

● **Insulation resistance　[MΩ]**

The insulation resistance value given by taking measurements at a given voltage between two terminals or between a terminal and ground.

● **Substrate bending**

This test is to evaluate durability against stress due to distortion on the printed circuit at time or after SMD is mounted.
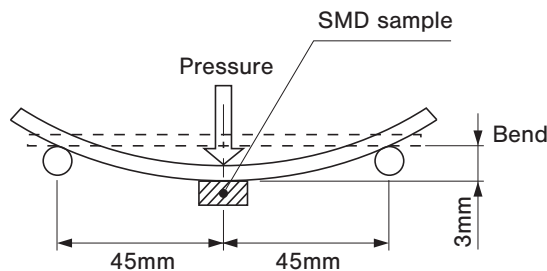
● **Dielectric strength　[V]**

This shows the specified voltage that can be applied between two terminals or between a terminal and ground without causing a short.

● **Terminal strength　N**

This shows the strength of the tip of the terminal to withstand a static load for a fixed period of time without breaking.

● **Rating　[VA]**

This shows the maximum voltage and current capacity of a switch. Use in excess of the rated capacity will result in failure.

● **Soldering heat**

This is to evaluate heat resistance in soldering SMD component.

● **Solderability**

This is a wetting evaluation test to find out how much new solder covers the terminals when immersed in the soldering bath, and to confirm the proper fillet formation in soldering process.

● **Pull-off strength**

This test is to evaluate adherence strength of SMD component soldered to the printed circuit board against peel off strength.

Pressure: 5 N

Holding time: 10 s

SMD sample

Pressure
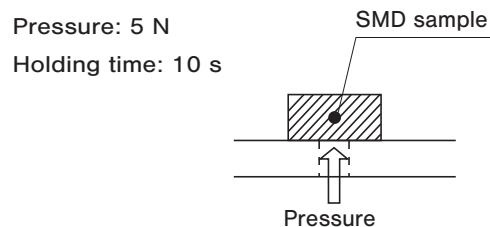
● **Low voltage & current rating**

This is operatable margin in the load range of low voltage & low current.

● **Binary coded decimal notation (BCD)**

This is a numbering system where each digit of a base 10 (decimal) number is expressed in binary notation.

● **BCH**

Binary Coded Hexa-decimal. Each row in hexa decimal is represented by binary coded system.

● **BCO**

Binary Coded Octal. Each row in octal is represented by binary coded system.

● **SCSI**

This is a micro computer control system and abbreviated from Small Computer System Interface, which controls 8 units.

● **Hexadecimal**

This is a number system that uses 16 as a base. A 〜 F are used to express the base 10 numbers from 10 〜 15.