1. **CIRCUIT**: A: (ON) — OFF  B: — (OFF)
2. **RATING**: 1A 250 VAC / 3A 125VAC
3. **CONTACT RESISTANCE**: 30mΩ Max
4. **INSULATION RESISTANCE**: DC 500V 100MΩ Min
5. **DIELECTRIC STRENGTH**: AC 1000V 1 MINUTE
6. **ELECTRICAL LIFE**: 5000 CYCLE Min
7. **MECHANICAL LIFE**: 10,000 CYCLE Min
8. **TERMINAL MATERIAL**: COPPER, ALLOY (SILVER OR GOLD), PLATED
9. **PUSH FORCE**: >0.3kg
10. **BUTTON COLOR**: RED, YELLOW, ORANGE, BLACK, GREEN
11. **OPERATING TEMPERATURE**: 260°C ~ 350°C
1. Application:
   1.1. Power switch applied on computer, electronic instruments and various home appliances.
   1.2. Application temperature range: -30°C to 130°C

2. Test standards:
   2.1. Pre load test: Point No.5 is pre-load test specially designed for customer, served as complimentary to switch’s capability.
   2.2. UL FILE NO.1054: according to the electrical level specified and acquired in Point No.3. The same switch is tested in the Test Condition Point No.4, undergoing the sequential tests of Point No.6, 7&8 without failure.
   2.3. Mechanical tests: the switch shall pass the tests specified in Point No. 9,10,11&12 with no electrical load, separately. But not the same switch is tested in each test.
   2.4. Cooling, heating, humidity tests: as specified in Point No. 13,14&15

3. Rating & acquired safety regulations: 3.1. 3A 125VAC

4. Test condition: The switch is tested at a temperature range of 10 - 40°C (UL), relative humidity range of 45-85%, and atmosphere 860-1060mbar.

5. Pre-load test electrical performance:
   5.1. Contact resistance: Measure by micro-ohm meter at DC. 5V 5A should be less than 20 mΩ initial
   5.2. Insulation resistance: Measure with DC. 500V applied between terminals of open contacts and between terminals of opposite polarity. Should be more than 100MΩ.
   5.3. Dielectric Voltage withstand test: A switch shall withstand for 1 minute without breakdown or arc in a potential applied between terminals of open contacts and between terminals of opposite polarity, and between terminals and frame as following:
   5.3.1. 1000 volts for a switch rated more than 125VAC.
   5.4. Operational force: The switch should be cable of being operated within a force of 400gram±200gram.

6. Load test: The same switch shall be operated according to following table, passing the overload tests first, then undergoing endurance test. During the testing, there should not be any contacts sticking, breakage & failure to the switch.

<table>
<thead>
<tr>
<th>Test</th>
<th>Voltage</th>
<th>Current</th>
<th>Power factor</th>
<th>Frequency</th>
<th>Times</th>
<th>By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overload test</td>
<td>125V</td>
<td>4.5A</td>
<td>0.75-0.8</td>
<td>6-10 cycles/min.</td>
<td>50</td>
<td>UL</td>
</tr>
<tr>
<td>Endurance test</td>
<td>125V</td>
<td>3A</td>
<td>0.75-0.8</td>
<td>6-10 cycles/min.</td>
<td>6000</td>
<td>UL</td>
</tr>
</tbody>
</table>

7. Temperature test: The test should be taken after load test with its rated current and voltage, and measured by the following standards.
   7.1. The temperature rise after the load test shall not be more than 30°C. (UL)

8. Dielectric Voltage withstand test: A switch after passing the test specified above shall withstand for 1 minute without breakdown or arc in a potential applied between terminals of open contacts and between terminals of opposite polarity, and between terminals and frame as following:
   8.1. 1000 volts for a switch rated more than 125VAC.
9. **Pull test**: A static force of 5 pound (2.27kg) being applied in one direction on the tip of the terminal for 1 minute. The terminal may be deformed, but shall not sustain any trouble as deviation and breaking of terminal and breaking of insulation material.

10. **Soldering test**:
   10.1. S.M.T. dipping: The temperature of soldering should be 250±5°C within 3±5°C seconds of dipping duration, and more than 75% of the terminal shall be covered by solder. After the soldering, the switch shall not have any deformations or fail to function.
   10.2. Handwork soldering: The temperature of soldering should be 350±5°C when applied with a 60W iron head, and should abide by the following rules:
      10.2.1. The soldering iron shall not be pressed to terminal when soldering, but only slightly touch the surface of the terminal.
      10.2.2. Soldering time should be controlled within 3 seconds, at most not exceeding 5 seconds.
      10.2.3. After the soldering, the switch shall not have any deformations or fail to function.

11. **Mechanical life test**: the switch applied without electric load, should operate at least 50,000 times, without mechanical failure.

12. **Strength of the operational part**: The test is no considerable loosing, break, and mechanical strange phenomena happened. The following conditions for testing:
   12.1. A static load of 2.5kgf is applied to the actuating direction lasting for 15 sec.
   12.2. A static load of 2.5kgf is applied to the front end with a right angle of actuating force lasting for 15 sec.

13. **Cooling endurance test**: Put the switch at -40±2°C for 96 hours and then take it out one hour measuring it at normal temperature and humidity surrounding within one hour after clean off water vapor. The following are tested.
   13.1. Contact resistance: Lower 20MΩ.
   13.2. Insulation resistance: Over 100 MΩ.
   13.3. Dielectric voltages withstand: The same as Point No. 8.

14. **Heating endurance test**: Put the switch at 85±2°C for 96 hours and then take it out one hour, measuring it at normal temperature and humidity surrounding within one hour after clean off water vapor. The following are tested.
   14.1. Contact resistance: Lower 20MΩ.
   14.2. Insulation resistance: Over 100 MΩ.
   14.3. Dielectric voltages withstand: The same as Point No. 8.

15. **Humidity endurance test**: Put the switch at 40±2°C relative humidity 90 to 95% for 96 hours and then take it out one hour, measuring it at normal temperature and humidity surrounding within one hour after clean off water vapor. The following are tested.
   15.1. Contact resistance: Lower 20MΩ.
   15.2. Insulation resistance: Over 100 MΩ.
   15.3. Dielectric voltages withstand: The same as Point No. 8.