

ARDV-05005-microUSB (5V, 1A, 5W)

SCOPE:

The purpose of the document is to specify the functional requirements of LB541-MP switching power supply.

INPUT CHARACTERISTICS:

1. Input Voltage

Rated Input Voltage: 100-240Vac
Variable input voltage: 90V—264Vac

2. Input Current:

0.3A max when input rated voltage and output rated load.

3. Input Frequency

Rate Frequency: 50/60Hz
Variation Frequency: 47-63Hz

4. In-rush Current:

30A mps Max Cold start at 240Vac input ,with rated load and 25°C ambient.

5. AC leakage Current:

0.25mA Max. At 240Vac input

OUTPUT CHARACTERISTICS:

1. Rated Output Power 5W

2. Combined Load/line Regulation

Voltage Min. Load Max Load Load Regulation Unload output voltage
+5V 0A 1.0A 4.75V-5.25V 4.75V-5.45V

3. Efficiency:

62%Min.at 100Vac input and output rated .Load.
65% Min.at240Vac input and output rated. Load.

4. Unload standby Power: 0.3W Max

5. Ripple And Noise

Under Rated voltage and nominal load, The ripple and noise are as follows when measure with Max Bandwidth of 20MHz and parallel 10UF/0.1UF, crossed connected at testing point.

Voltage current Ripple And Noise(Max)

+5V 1.0A 100m Vp-p

6. Turn On Delay Time:

2 second Max .At 100Vac input and output Max. Load

7. Rise Time:

100ms Max. At 100Vac input and output Max. Load

8. Hold Up Time:

5ms Min.at100Vac input and output Max .Load.

PROTECTION FUNCTION:

1. Short circuit protection:

The Power Supply will be auto recovered when short circuit faults remove.

2. Over current Protection:

The power supply will be auto recovered when over current faults remove.

ENVIRONMENTAL REQUIREMENTS:

1. Operating Temperature:

0°C to +40°C ,Full Load, Normal Operation.

2. Storage temperature:

With enclosure:-10°C to +55°C



3. Relative Humidity:

5%(0°C)~90%(+40°C) 72h Full Load, Normal operating.

4. Vibration:

- Operating: IEC 721-3-3 3M3
5~9Hz,A=1.5mm
(9 ~ 200Hz,Acceleration 5m/s)
- Transportation:
IEC 721-3-2 2M2
5~9Hz, A=3.5mm
9~200Hz, Acceleration=5 m/s²
200~500Hz, acceleration=15 m/s²
- Axes, 10 cycles per axis:
No permanent damage occur during testing.
The product has to restore to its original situation after power off/on

MECHANICAL CHARACTERISTICS:

1. Dropping Testing:

The product to be dropped from 1 meter height to a concrete floor no breakage.

2. Cable Flexing Testing:

The DC cord shall with weight of 200g,it swings at angle 60 deg, 2000cycle.

Time min Bending speed: 40cycle per minute shall to be no breakage to the code

SAFETY STANDARD:

1. Safety Accord with:

2. DIELECTRIC STRENGTH Hi-Pot:

Primary to secondary, 3000Vac/5mA/5s.

Primary to Case ,500Vac/5mA/60s.

3. Insulation resistance:

Primary to secondary :4MΩ Min at 500V DC

OUTLOOK DRAWING (Common difference: +/-0.2mm):

