



Product Specification Sheet

Part Type : **LED driver**

Description: **46W-1000mA Constant Current**
0-10V Dimmable

Part Number: **SIE46-I1000-42 120-277 W D1 B-S1S2**

1. Input Requirement

1.1 Input Voltage

The nominal input voltage is 120-277VAC

Operating Range: 108-305VAC

1.2 Frequency

The nominal input frequency is 50Hz/60Hz

1.3 Current

The maximum input current is 0.6 Amp at 120Vac at max output load of 1000mA.

1.4 Efficiency

The typical efficiency (watts out / watts in) is 85% @120V and 85% @277V with rated load.(Full Load)

1.5 Power Factor

@ 277VAC, >0.90(@80%Load)

@ 120VAC, >0.90(@80%Load)

1.6 Inrush Current

120VAC @ 25 DEG C: <40Amp peak

1.7 THD

THD: < 20% @ 25°C 120-277VAC, full load (w/o Dimmer)

2. Output Requirements

2.1 Output Current Setting

Set nominal current at this voltage.

Output	Voltage	Current	Tolerance
1	Max 35VDC	1000mA	+/- 5%
2	Max 35VDC	900mA	+/- 5%
3	Max 35VDC	750mA	+/- 5%

2.2 Output Voltage Range

Driver must work at these voltages.

Output	Voltage	Current	Tolerance
1	25-35VDC	1000mA	+/- 5%
2	25-35VDC	900mA	+/- 5%
3	25-35VDC	750mA	+/- 5%

2.3 Output Line Regulation

With output clamped to below set points, vary input from 120-277VAC.

Output	Voltage Set Point	Current range
1	28VDC	950-1050mA
2	28VDC	855-945mA
3	28VDC	713-787mA

2.4 Current Stability

+/- 5% maximum after 8 hours

2.5 Max Rated Output Load

Output	Voltage	Current range
1	35VDC	1000mA

2.6 Ripple Factor

Measured at max rated load and LED load connecting to the output is see as below : $V_F=35V$

Ripple factor $<5\%$ ($I_{pk-pk}/2/I_{mean}$).

2.7 No Load Voltage

Not to exceed 55VDC.

2.8 Turn on Delay

Measured @ 120-277VAC max rated load: < 0.75 seconds.

2.9 Flicker $<5\%$

3. Protection Requirement

3.1 Short circuit protection:

When operating under any line condition into a short circuit condition for an indefinite period of time, the power supply shall be self recovering when fault condition is removed.

3.2 Over-current protection:

When operating under any line condition into any over load condition for an indefinite period of time, the power supply shall be self recovering when fault condition is removed.

4. Environmental Conditions

4.1 Operating

The power supply shall be capable of operating continuously in any mode without performance deterioration in the following environmental conditions:

4.11 Ambient Temperature:

-20 to 50 Deg C. 100% rated power at 50 Deg C.

4.12 Class P

Tc.:90 °C

4.13 Relative Humidity:
5 to 95%, non-condensing

4.14 Cooling:
Convection

4.2 Non-Operating

The power supply shall be capable of standing the following environmental conditions extended periods of time, without sustaining electrical or mechanical damage and subsequent operational deficiencies.

4.2.1 Ambient Temperature:
-40 to 85 Deg C.

4.3 Shock & Vibration:

MIL-STD-810G Shock Method 516.6 procedure IV and Vibration Method 514.6 Procedure I, Category 4

5. Reliability

5.1 MTBF

>300,000hrs calculated to MIL-HDBK217F @ 25 DEG C. rated load.
Ground Benign.

5.2 Product Life

>50000hours @ Tc=75 Deg C, rated load.

6. EMC

6.1 Conducted&Radiate
FCC Part 15 Class B

6.2 Audible Noise:

Class A sound rating not to exceed 24dBA (audible) when installed in fixture and such fixture is installed in its normal use. The measurement is to be made from a distance not less than 3 feet.

6.3 ESD:
IEC 61000-4-2 Level 2: 4KV Air and Contact.

6.4 Input Transient Protection
Power supply shall comply with IEEE C.62.41-1991, Class A operation.
The line transient shall consist of seven strikes of a 100 kHz ring wave,
2.5 kV level for both common mode and differential mode.

7. Safety

7.1 Agency Approvals
UL 8750-LED equipment for use in lighting product
UL1310-CLASS 2 Power units
CSA C22.2 No. 250.13-12-LED equipment for lighting applications

8. Dimmable

8.1 0-10V Dimming
0-10V Input Signal: 0-10V
Dimming Range: 10-100%

9. Mechanical

9.1 Materials
Metal case
All material to be ROHs compliant to Directive 2002/95/EC
Wires to be Stranded with UL approval
Input: Black & White : 300mm , 18AWG 105°C 600V Solid Line
Output: Red & Blue & Black: 500mm , 20AWG 105°C 600V Solid Line
Dimming: Purple & Gray: 500mm , 18AWG 105°C 600V Solid Line

9.2 Size and shape: 未标注公差: ± 1.5 单位: mm

