

18W High Performance LED Fluorescent Power Module

Type	Application	IC	Input Power	Input Voltage	LED series-parallel connection
DB881-C01C	LED Fluorescent	FT881a	18W	90~265VAC	12 Series 24 Parallels

DB881-C01C is FMD latest LED power supply module based on the FT881a controller IC which integrates a 500V start up circuitry and applies both proprietary patented Zero-current power supply and Wide-voltage constant current technology. A High performance LED fluorescent lamp can be simply made by hooking up LED string and lamp fixture with DB881-C01C LED power supply.

We have accumulated rich experience in the field of LED power design. We have successfully launched the 880 LED driver IC and we have released fluorescent power application for PC tube, aluminum tube and light bulbs.

Main Features:

- Universal AC Input range: 90~265VAC
- Design for aluminum shielded covered tube
- Small Form factor fit for T8\T10 tube
- Support 12 LED in series or Output voltage 36-39V
- 90% High efficiency
- Meets ENERGY STAR SSL requirement PF> 0.9
- Temperature Rise less than 30°C
- Long Lifetime design, more than 35000 hours
- High Current accuracy $\pm 2\%$
- Current ripple less than $\pm 15\%$
- Meets EN 55015B EMI Limits
- Meets EN61000-3-2. Class D requirements
- No-load power consumption less than 0.3W
- No-load output voltage 44V (adjustable)
- Support Inductor based rectifier
- Pass 1meter height drop test



DB880-C01C Board

- Support Operation Ambient temperature $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$
- OVP, short circuit protection

Module measuring data:

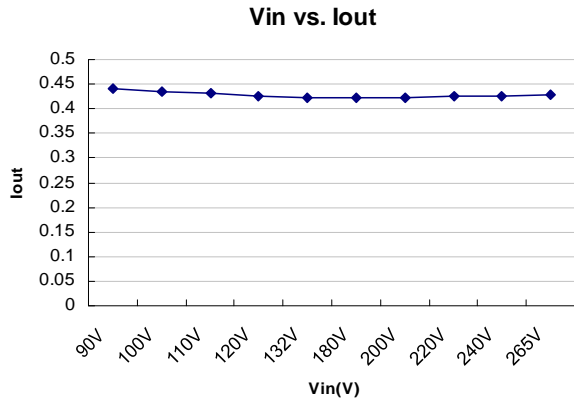


Figure 1: Input voltage vs Output current

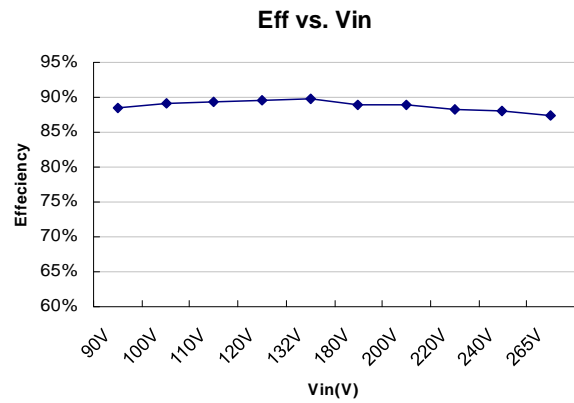


Figure 2: Input voltage vs efficiency

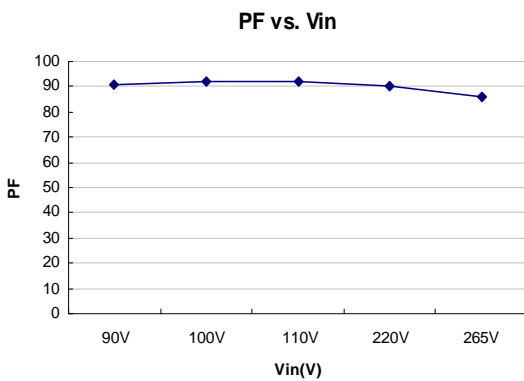


Figure 3: Input voltage vs PF

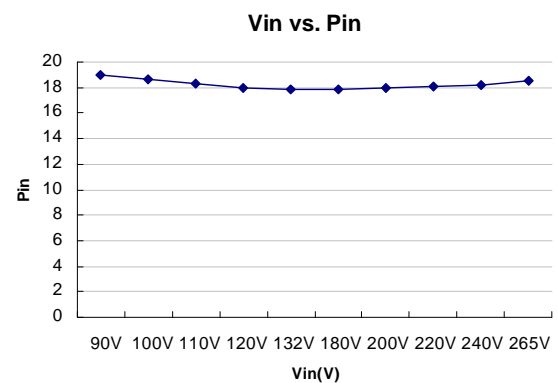


Figure 4: Input voltage vs efficiency

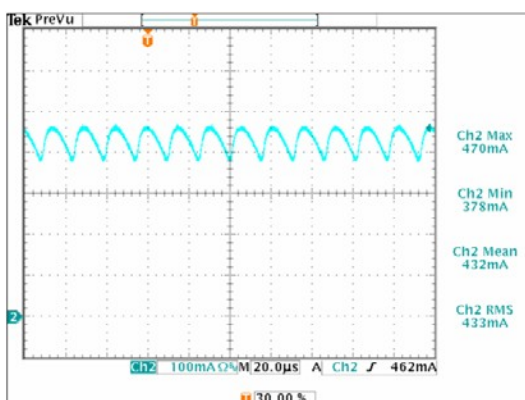


Figure 5: LED current ripple

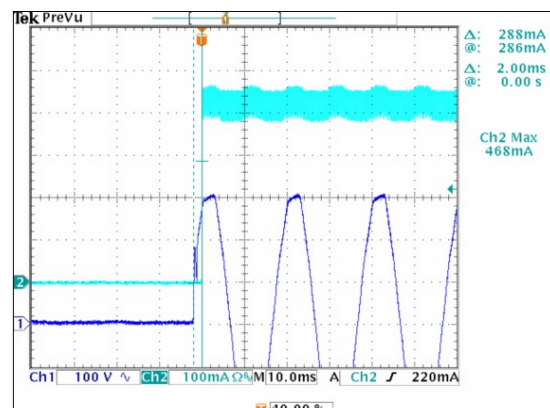
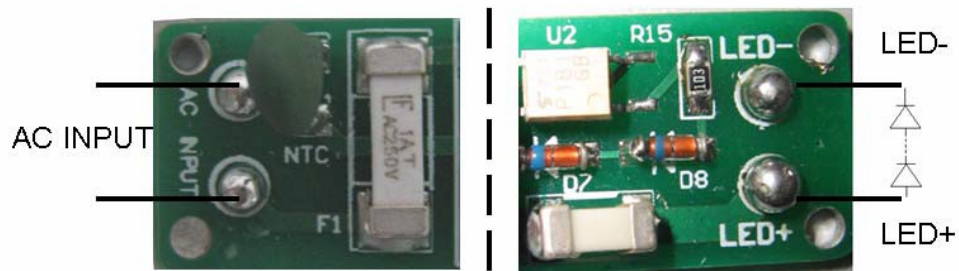
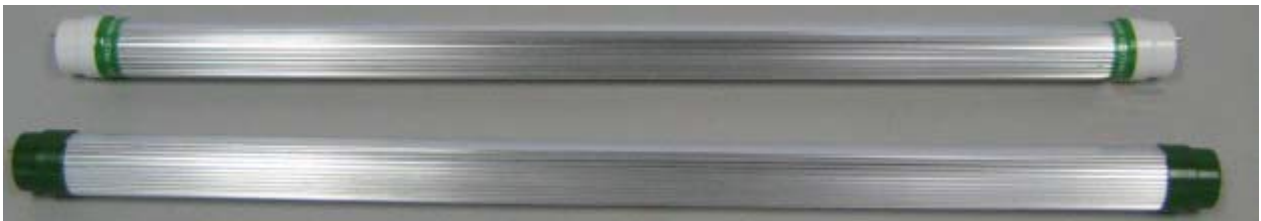


Figure 6: 2ms Start-up waveform

Module user guide: (please see below figure)



LED tube used the FT881-C01C:



After Power on:



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