

AMERICAN BRIGHT **OPTOELECTRONICS CORP.**

Specification for LED Driver Series

AB-D20100-V48-Q



Description:

High cost performance, SELV. Open circuit, short circuit, overload, and over temperature protection.
Meet Class II request. The warranty is 5 years.

Model

Model	Rated Output Voltage	Rated Output Current	Maximum Output Power	Output Voltage Tolerance
AB-D20100-V48-Q	48V	0-2.08A	100W	±5%

Naming System:

AB-D20100-V48-Q

20: IP20

100: 100 Watts

V48: 48 Volts

Q: No Dimming

Input

Parameter	Conditions	Request	Note
Input Voltage	Ta	100-240Vac	--
Input Frequency		50Hz/60Hz	--
Input Current	25°C, rated input voltage, output with maximum rated power	< 1.3A	--
Input Power		< 114W	--
Efficiency		≥ 89%	--
Stand-By Power Consumption	25°C, rated input voltage, output without load	< 0.5W	Average
Inrush Current	25°C, rated input voltage	< 75A	Peak
Power Factor	25°C, rated input voltage, output with maximum rated power	≥ 0.9	--

Output

Parameter	Conditions	Request	Note
Startup time	25°C, rated input voltage, output with maximum rated power	< 0.5s	230Vac 50Hz
Output Voltage and Precision	Ta, Rated Input Voltage	48V±5%	< 50V
Output Current Range	Ta, Rated Input Voltage	0-2.08A	--
Output Voltage Wave	25°C, rated input voltage, output with maximum rated power	<500mV	Vp-p
Output Overload	25°C, rated input voltage, output with 2 LED Load	Yes	--
Output Current and Precision	Ta, Rated Input Voltage	--	--
Rated Output Voltage Range	Ta, Rated Input Voltage	--	--
Output Current Wave	25°C, rated input voltage, output with maximum rated power	--	Ip-p
Dimming Mode	--	--	--
Dimming Range	--	--	--

Protection

Parameter		Conditions	Request
Protection	Open Circuit	Ta, rated input voltage, no load	--
	Overload	Ta, 0.94-1.06 times of input voltage 1.4 times of rated	Yes
	Short Circuit	Ta, 0.94-1.06 times of input voltage	Yes
	Over Temperature	Ta, 0.94-1.06 times of input voltage, temperature detected point more than 115 degree	Yes
	Over Voltage	Ta, 0.94-1.06 times of input voltage, output voltage is 1.5 times of rated one	Yes
	Auto Recovery	Over load, short circuit revocation	Yes
	Latch Off	Over voltage, overheat re-start after cut off	Yes

Temperature and Others

Parameters	Conditions	Request
Operating Temperature	--	-20-45°C
Relative Humidity	--	45%-85%
Maximum Case Temperature	--	90°C
Lifetime	Max. Ta, rated input voltage, output with max. rated power	30,000 hrs
Working Noise	25°C, rated input voltage, output with rated power, mute box background noise<30dB, pickup 10cm distance from products	< 35dB

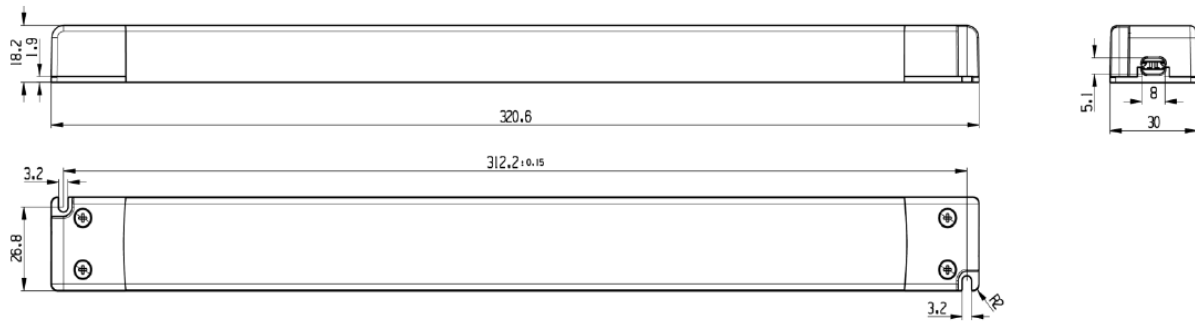
Mechanical, Mounting

Items	Conditions
Case Material and Size	Plastic Case
Mounting Ways	Independent
Insulation Type	Class II
IP Grade	IP20
Input Cables dimension	Terminal Block
Output Cables Dimension	Terminal Block
Output Cables Length	Max 2M

Safety & Standards

Items	Conditions
Safety	IEC61347-1, IEC61347-2-13 (Combine with light IEC60598)
Harmonic	IEC61000-3-2
EMI	IEC55015 FCC Part 15B
EMS	IEC61547

Mechanical Specification (Unit: mm)



Wiring Diagram

