A011 FLEXBLOCK

High Output Wide Range LED Driver

PRODUCT OVERVIEW

The A011 FlexBlock is a high output, wide range, LED driver that are a line of true current regulated drivers for powering LEDs. The LUXdrive FlexBlock™ line of LED drivers are the ideal choice for powering all types of high-brightness and high-power LED packages and arrays. The FlexBlock is capable of operating in either buck-boost or boost only modes.

| Product		A011	
General	Topology	Buck-Boost, Boost	
	Input Connection	Red (V+) / Black (V-)	
	Output Connection	White (LED +) / Blue (LED -)	
	Dimming Connection	Pink (+) / Purple (-)	
Electrical	Input Voltage	10 Vdc (min)	32 Vdc (max)
	Output Voltage, Buck-Boost	48Vdc - Vin	
	Output Voltage, Boost	48 Vdc (max)	
	Output Current (mA)	350, 500, 700	
	Output Tolerance	±10%	
	Efficiency	up to 95%	
	Quiescent Current	< 6 mA	
Dimming	Turn-On Voltage	1.7 Vdc ±5%	
	Full-On Voltage	9 Vdc ±5%	
	Dynamic Range	5 - 100%	
	Current-Source	< 6 mA	
Environment	Operating Temp (Tcase)	-40 to 80° C	
	Storage Temp	-40 to 125° C	
Mechanical	Connection	6" 18 gauge wire	
	Dimension	2" x 1.2" 0.375"	
	Weight	1.6 oz (45 g)	
Regulatory	Compliance	RoHS 3 (EU 2015/863)	
	Warranty	LEDdynamics Warranty	

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Ordering Information

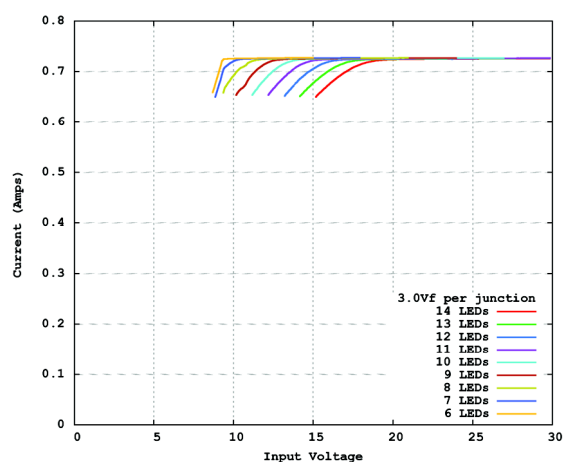| PRODUCT FAMILY	PART NUMBER	DESCRIPTION
FlexBlock	A011-D-V-350	LUXdrive FlexBlock 350mA
	A011-D-V-500	LUXdrive FlexBlock 500mA
	A011-D-V-700	LUXdrive FlexBlock 700mA

Operation
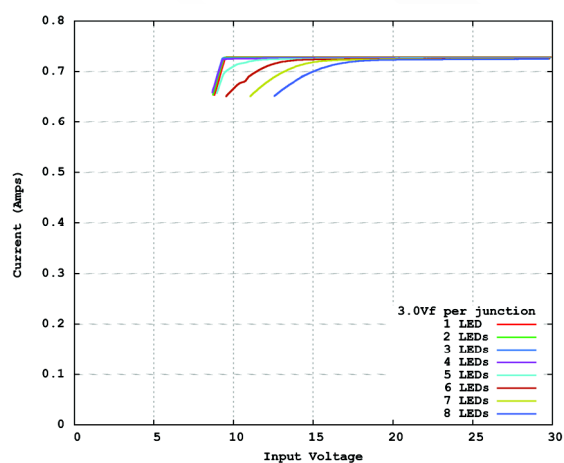
Figure 1. A011-D-V-700 Buck-Boost Mode
Input Voltage vs Output Current
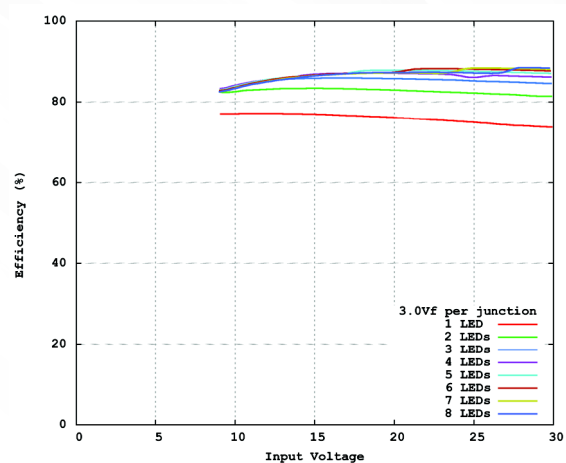
Figure 2. A011-D-V-700 Buck-Boost Mode
Input Voltage vs Efficiency

Figure 3. A011-D-V-700 Boost Mode
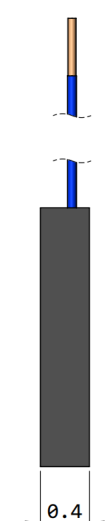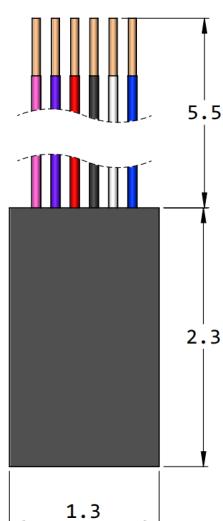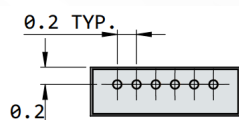Input Voltage vs Output Current
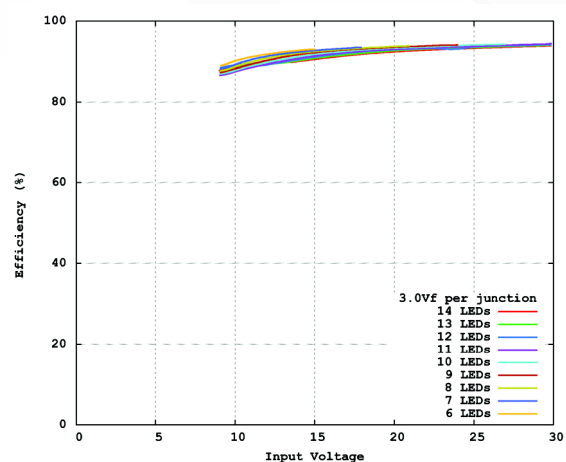
Figure 4. A011-D-V-700 Boost Mode
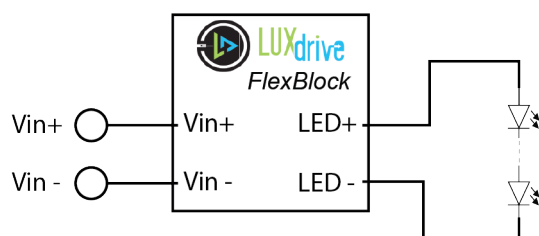Input Voltage vs Efficiency

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Mechanical

0.2 TYP.
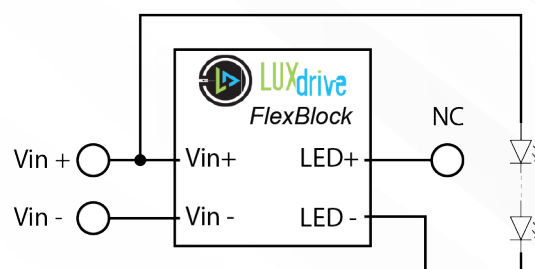
0.2

5.5

2.3

1.3

0.4

1. Dimensions in inches
2. Tolerance: 0.xx" = +-0.015"

Wiring Examples

LUXdrive
FlexBlock

Vin+   Vin+   LED+

Vin -   Vin -   LED -

Figure 5. A011 Wire Diagram Buck-Boost Mode

LUXdrive
FlexBlock   NC

Vin +   Vin+   LED+

Vin -   Vin -   LED -

Figure 6. A011 Wire Diagram Boost Mode
Load must be greater than Vin.
WARNING
**Do NOT apply power to input of the driver
without first hooking up the load**