A009 BUCKBLOCK

High Output Wide Range LED Driver

PRODUCT OVERVIEW

The A009 BuckBlock is a high output, wide range, LED driver that are a line of true current regulated drivers for powering LEDs. The LUXdrive BuckBlock™ line of LED drivers are the ideal choice for powering all types of high-brightness and high-power LED packages and arrays.

Product		A009	
General	Topology	Buck	
	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, 1000mA	80% of Vin	
	Output Voltage, 1400mA	75% of Vin	
	Output Voltage, 2100mA	50% of Vin	
	Output Current (mA)	1000, 1400, 2100	
	Output Tolerance	±10%	
	Efficiency	up to 90%	
	Quiescent Current	< 4.5 mA	
Dimming	Turn-On Voltage	1.7 Vdc ±5%	
	Full-On Voltage	9 Vdc ±5%	
	Dynamic Range	5 - 100%	
	Current-Source	< 1 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)	

A009 BUCKBLOCK

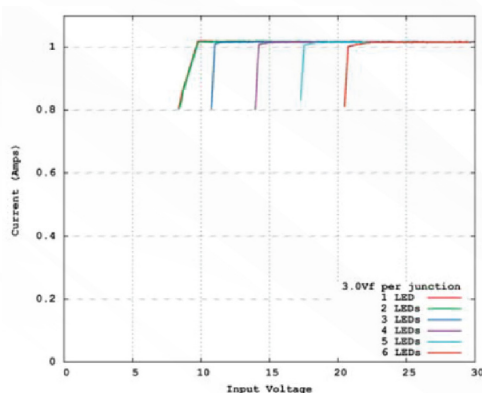## High Output Wide Range LED Driver

Operation

Figure 1. A009-D-V-1000
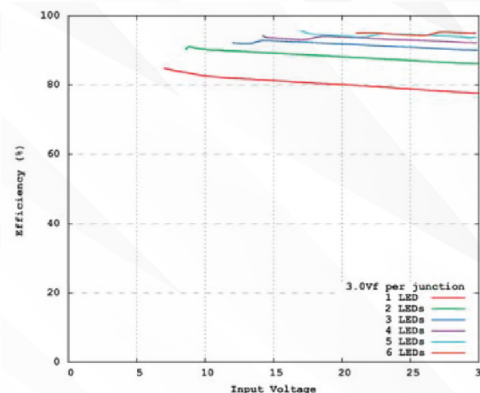Input Voltage vs Output Current

Figure 2. A009-D-V-1000
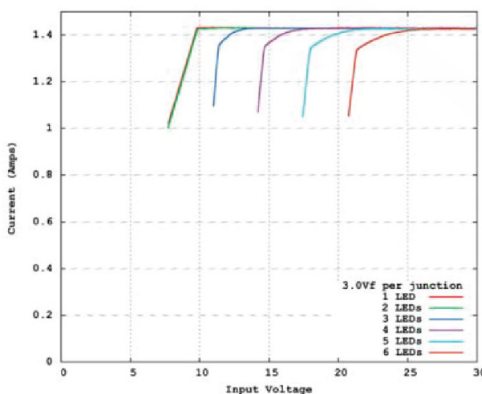Input Voltage vs Efficiency

Figure 3. A009-D-V-1400
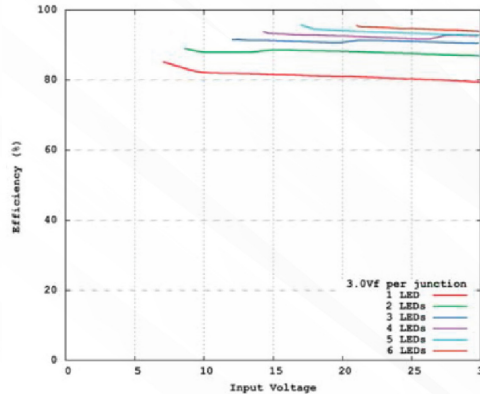Input Voltage vs Output Current

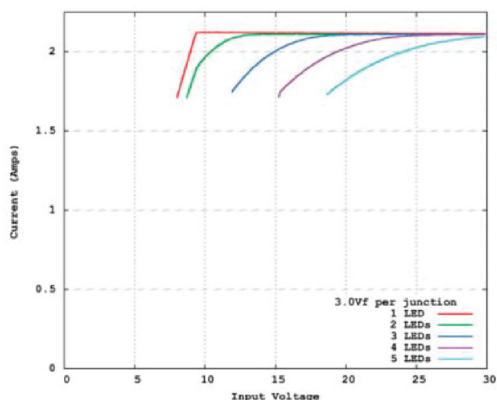**Figure 4.** A009-D-V-1400
Input Voltage vs Efficiency

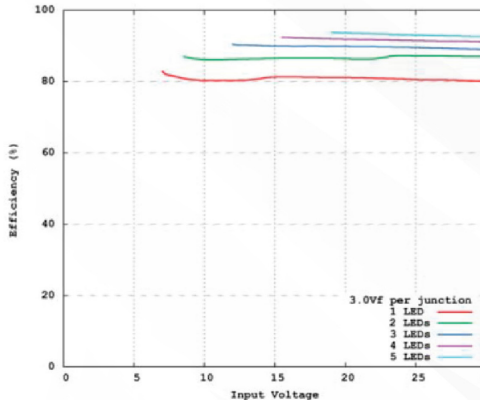**Figure 5.** A009-D-V-2100
Input Voltage vs Output Current

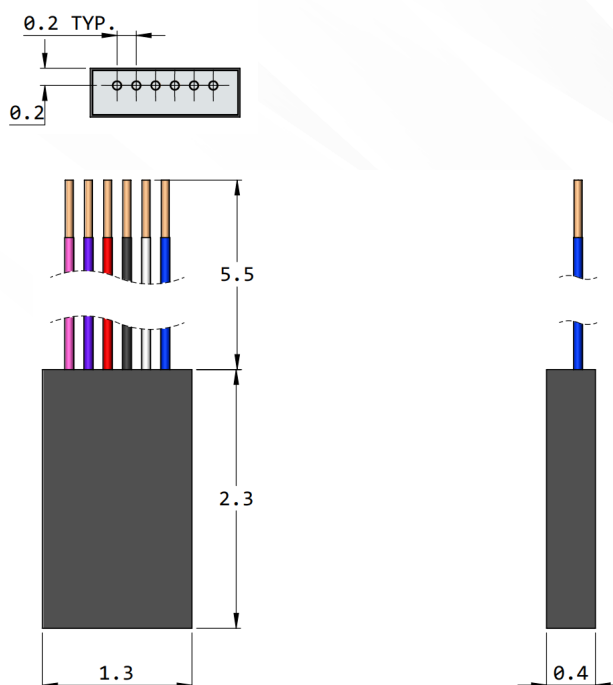**Figure 6.** A009-D-V-2100
Input Voltage vs Efficiency

A009 BUCKBLOCK

High Output Wide Range LED Driver

Ordering Information

PRODUCT FAMILY	PART NUMBER	DESCRIPTION
BuckBlock	A009-D-V-1000	LUXdrive BuckBlock 1000mA
	A009-D-V-1400	LUXdrive BuckBlock 1400mA
	A009-D-V-2100	LUXdrive BuckBlock 2100mA

Mechanical

0.2 TYP.

0.2

5.5

2.3

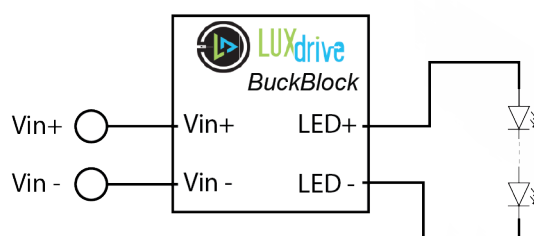1. Dimensions in inches
2. Tolerance: 0.xx" = +-0.015"

1.3

0.4

Wiring Example

Figure 7. A009 Wire Diagram for Standard Operation