

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# Programmable LED Driver • Adjustable Output Current

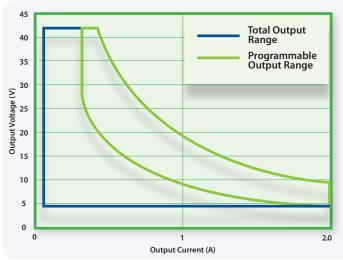
• 10~20W Power Rating

#### **Features:**

- Programmable current can be adjusted prior to installation
- 0~10V Low Voltage and PWM Dimming Function
- 90% Efficiency at Full Load
- Comprehensive protection against short-circuit, over voltage, overload and over temperature
- 0.5W Off-State Power Consumption
- 130K hours life time @ 45°C
- **RoHS and WEEE Certified**

NMB's line of Performance LED Drivers offer a dimmable driver with a wide output current range and the ability to program the output current from 350mA to 2A, to match your application requirements. With brightness compensation and diagnostics, installation and maintenance has never been easier! The 0~10V and PWM digital dimming feature is IEC60929 and ANSI E1.3 compliant. Class II protection assures reinforced insulation between input and output voltages. Standard models offer IP20 rating, with higher ratings available on request to fulfill OEM requirements.

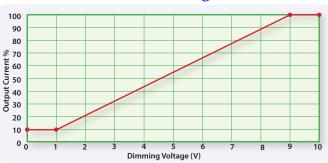
#### CLSD-020-PRG-G2 Output Range



\*Note: Programming the current of the Performance Line of CLSD Series Drivers requires the use of the CLSD-PRG-BOX-G2 Programming Box plus NMB's LED Driver Set-up Application Software. Please refer to our website at www.nmbtc.com/lighting for additional information.



#### 0~10V Dimming Ratio



#### **PWM Dimming Ratio**





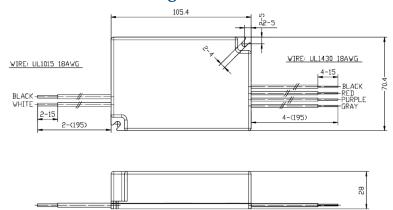
www.nmbtc.com/lighting

# **LED Driver Programmable Output Current Coverage**

LED DRIV	/ER - 10W~20W POWER RATING			
	DC Voltage Output [Vdc]	Current O	Current Output [mA]	
PART NUMBER	Min. Max.	Min.	Max.	
CLSD-020-PRG-G2	5 42	350	2000	
ELECTRICAL SPECIFICATIONS				
Universal AC Input Voltage	90-305 (Typica	90-305 (Typical 100 VAC/240 VAC)		
Input Frequency	5	50/60Hz		
Inrush Current	<3	<36A (Max)		
Dimming Ratio	10% in Linear Mod	10% in Linear Mode, and 0% in PWM Mode		
EPA Off-State	0.5	0.5W (Max)		
Input Power at Full Load	26	26W (Max)		
Efficiency at Full Load		90%		
CONTROL & PROTECTION				
Programmability	Programmable (using CLSD	Programmable (using CLSD-PRG-BOX-G2 Programming Box)		
Protection	Short Circuit / Over voltag	Short Circuit / Over voltage / Overload / Over temperature		
<b>ENVIRONMENTAL, SAFETY &amp; MECHANICA</b>	L SPECIFICATIONS			
CRITERIA	SPECIFICATION	REFE	RENCE	
Power Factor	>0.9			
Harmonics	Class C	IEC 61	IEC 61000-3-2	
Isolation Voltage	3000VAC	Mini	Minimum	
Surge Immunity	Level 3	Level 3 IEC 61000-4-5		
Operating Temperature (around case)	-25°C to 60°C	·	Operating	
Storage Temperature	-40°C to 85°C		Non-Operating	
Lifetime (Minimum hours)	130,000		oad (45°C 110V)	
Weight	220g	Max	Maximum	
Ingress Protection	IP20			
Safety: UL	UL8750 UL60950 / UL1310 Class 2 Outp		roved	
CSA	C22.2 No. 107 C22.2 No. 223	Арр	roved	
EN	61347-1 / 61347-2-13	Арр	roved	
EMC	FCC 47 CFR Part 15 Class B EN61000-3-2 / EN61000-3-3		roved	
CE	EN61000-3-2 / EN61000-3-3	Арр	roved	

EN61000-3-3

## **Mechanical Drawing**





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