

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!



### Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







# **LED Dimmable Drivers**

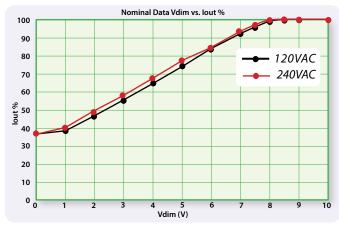
- Low & High Current Programmable LED Drivers
- 10~20W Power Rating

#### **Features:**

- Programmable current can be adjusted prior to installation\*
- 0~10 Low Voltage Dimming Function
- Comprehensive protection against shortcircuit, overvoltage, overload and over temperature
- IP66 rating for use in environments where dust or moisture is a concern
- High Efficiency

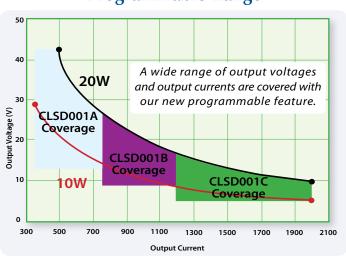
Satisfying market requirements for a single driver that would cover a wide range of currents and voltages, NMB Lighting introduces a new standard series of low and high current, LED dimmable programmable drivers. The new CLSD Series of LED drivers provides the unique ability to program the output current for your desired application. The flexible nature of the CLSD Series design platform facilitates rapid modification for a wide variety of customer specific applications. Additionally, current levels can be preset, adjusted during the development of the application, or prior to installation.

#### **Dimming Ratio**





#### **Programmable Range**



\*Note: Programming the current of the CLSD Series Drivers requires the use of the CLSD004 Programming Box plus NMB's LED Driver Set-up Application Software. Please refer to our website at www.nmbtc.com/lighting for additional information.



www.nmbtc.com/lighting

## **LED Driver Programmable Output Current Coverage**

LOW & HIGH CURRENT LED DRIVER - 10W~20W POWER RATING					
	DC Voltage Output [Vdc]		Current Output [mA]		
PART NUMBER	Min.	Max.	Min.	Max.	
CLSD001A	13.3	42	350	750	
CLSD001B	8.3	25	750	1200	
CLSD001C	5	16	1200	2000	

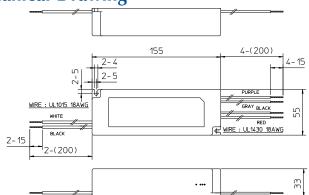
ELECTRICAL SPECIFICATIONS			
Universal AC Input Voltage	90-277 (Typical 120 VAC/240 VAC)		
Input Frequency	50/60Hz		
Inrush Current	<29A (Max)		
Dimming Ratio	35%		
Leakage Current	0.05mA (Max)		
Input Power at No Load	3W (Max)		
Input Power at Full Load	28W (Max)		
Efficiency at Full Load	85%		

 Current Limit
 Programmable (using CLSD004 Programming Box)

 Protection
 Short Circuit / Overvoltage / Overtemperature

ENVIRONMENTAL, SAFETY & MECHANICAL SPECIFICATIONS						
	CRITERIA	SPECIFICATION	REFERENCE			
Power Factor		>0.9				
Harmonics		Class C	IEC 61000-3-2			
Isolation Voltage		1500VAC	Minimum			
Surge Immunity		Level 3	IEC 61000-4-5			
Temperature (around case)		-20°C to 60°C	Operating			
Storage Temperature		-40°C to 85°C	Non-Operating			
Lifetime (Minimum hours)		130,000	At Maximum Load (45°C 110V)			
Weight		500g	Maximum			
Ingress Protection		IP66				
Safety:	UL	1310	Approved			
	CSA	C22.2 No. 60950-1 C22.2 No. 223	Approved CLSD001A Approved CLSD001B, CLSD001C			
	EN	61347-1/61347-2-13	Approved			
	EMC	FCC 47 CFR Part 15 Class B / EN55015 /EN61547 / EN61000-3-2 / EN61000-3-3	Compliant			
	CE	EN55015 / EN61000-3-2 / EN61000-3-3 / EN61547	Compliant			

#### **Mechanical Drawing**





#### LIGHTING

NMB Technologies Corporation A Minebea Group Company Corporate Headquarters 9730 Independence Avenue Chatsworth, California 91311 Tel: 818-341-3355 • Fax: 818-341-8207 lighting@nmbtc.com www.nmbtc.com