



DLD SERIES

57 WATT

BUCK LED DRIVER



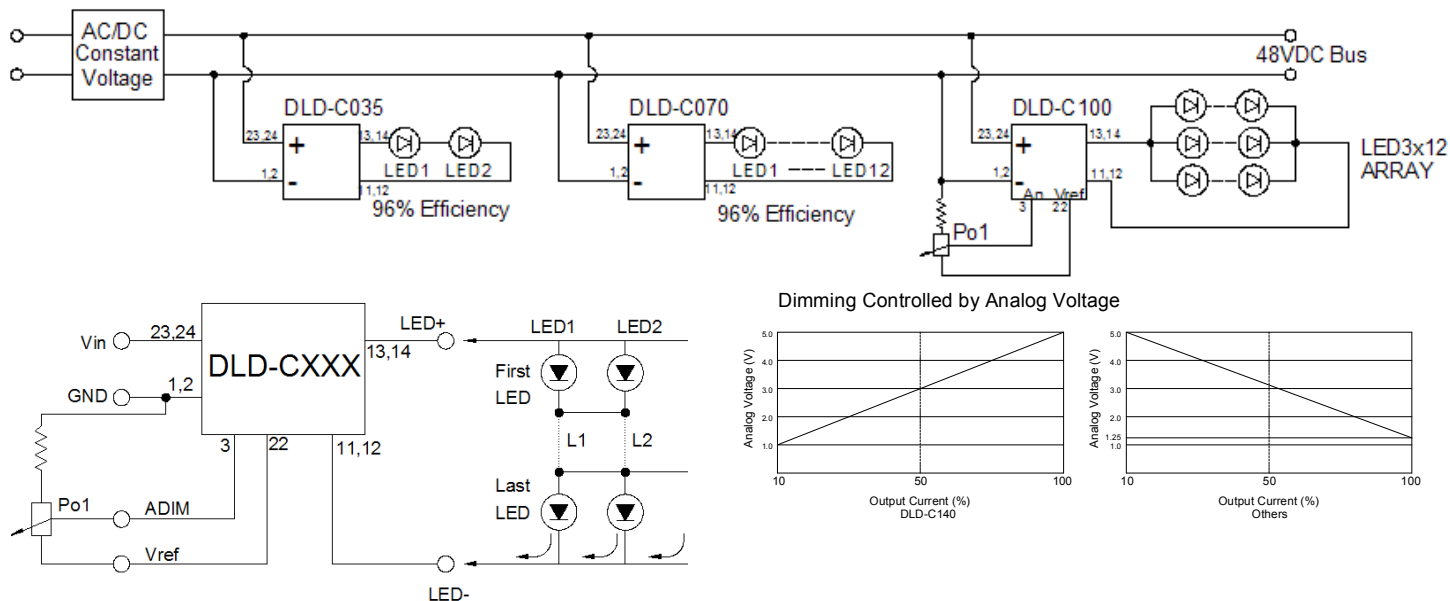
Features

- * LED Driver Current up to 1400mA
- * Constant Current Output
- * Digital PWM Dimming
- * Analog Dimming Control
- * High Efficiency up to 96%
- * Continuous Short Circuit Protection
- * DIP16 Package and Wired Version
- * High Reliability
- * IP67 Protection



MODEL	INPUT VOLTAGE RANGE	OUTPUT OPERATING VOLTAGE	OUTPUT RATED CURRENT	OUTPUT RATED POWER	RIPPLE & NOISE (Max.) NOTE2	%EFF. (Typ.) NOTE3
DLD-C035	4.5-60 VDC	2-57 VDC	350 mA	20 W	300 mVpp	96%
DLD-C070	4.5-60 VDC	2-57 VDC	700 mA	40 W	500 mVpp	96%
DLD-C100	4.5-60 VDC	2-57 VDC	1000 mA	57 W	500 mVpp	96%
DLD-C140	10-36 VDC	8-33 VDC	1400 mA	46.2 W	500 mVpp	96%

- Note:
1. $3V < V_{in} - V_{out} < 30V_{dc}$, to keep current accuracy. Nominal Input Voltage: 48Vdc, 28Vdc (C140 models)
 2. Ripple and Noise are measured at rated current, Nominal Input and 36Vdc or 24Vdc (C140 models) output and 20MHz bandwidth with a 0.1uF ceramic capacitor.
 3. Measured at rated current, Nominal Input and 36Vdc or 24Vdc (C140 models) output.
 4. Acceptable customer modifications.



Specifications

All specifications are Typical at nominal line , full load and 25°C unless otherwise noted

INPUT SPECIFICATIONS:

Input Voltage 1400mA/others 10-36VDC/4.5-60Vdc
 Input Surge Voltage (1second) ... 1400mA/others ... 50Vdc/65Vdc max.
 Input Filter Capacitor
 Under Voltage Lockout Power up 8.0Vdc/4.0Vdc typ.
 Power down 6.9Vdc/3.7Vdc typ.

OUTPUT SPECIFICATIONS:

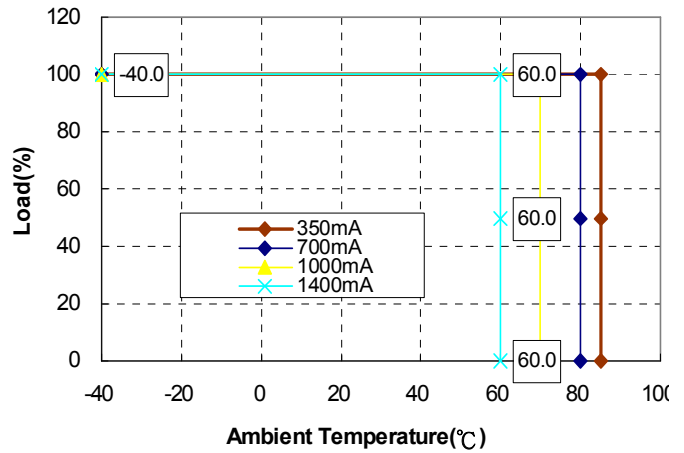
Constant Current Accuracy (note1)±5% max.
 Current Line Regulation (note2) ±5% max.
 Current Load Regulation (note3) ±5% max.
 Short Circuit Protection Constant Current with Auto Recovery
 Start up time 60ms max.

GENERAL SPECIFICATIONS:

Efficiency See Table
 Temperature Coefficient ±0.05%/°C

Isolation Voltage Non-isolation
 Switching Frequency ... 1400mA/Others 50-500KHz/ 300KHz typ.
 Operating Ambient Temperature -40 ~ 85°C see Derating Curve
 Case Temperature 100°C max.
 Cooling Natural Convection
 Storage Temperature -55 ~ 125°C
 Operating Humidity 10%~95%RH non-condensing
 Operating Altitude Sea Level to 3000m
 Vibration 0~500Hz, 2G 60min./1cycle, period for 3hours, 3 axes
 Shock 30g peak, half sine, 6 axes
 MTBF, L-HDBK-217F (25°C) >1.6Mhrs
 Dimensions 1.28x0.66x0.40 Inches(32.5x16.8x10.2 mm)
 Weight 18g.
 Case Material Plastic Case

DLD Derating Curve



PWM DIMMING: (leave open if not used)

Input Voltage Range TTL Logic Compatibility 5Vdc typ.
 Threshold Voltage Module on >1.75Vdc, Module off <0.5Vdc
 Switching Frequency 1KHz max.
 Output Current Range 10% to 100%
 Minimum On Time 100ns

ANALOGUE DIMMING: (leave open if not used)

Control Voltage Range 1.25-5Vdc/1-5Vdc (DLD-C140)
 Analogue Pin Drive Current 0.4mA max.

SAFETY AND EMISSIONS:

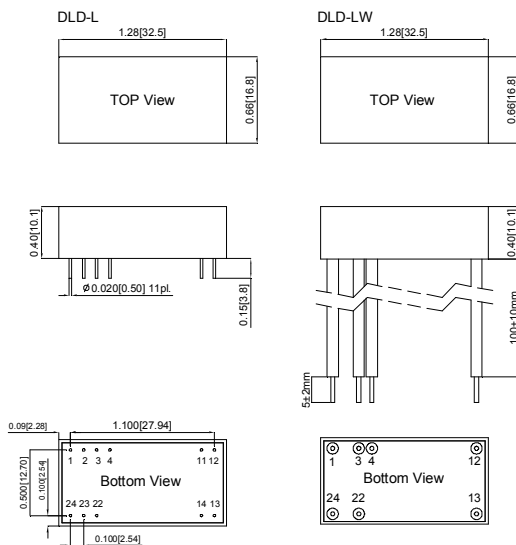
EMI EN55022/EN55015 Class B
 EMS EN61547,EN61000-4-2,3,4,5,6

NOTE:

- 3V<Vin-Vout <30Vdc to keep current accuracy.
- Current line regulation is measured from High Line to Low Line.
- Current load regulation is measured from high to low operating voltage.
- Acceptable customer modifications.

Mechanical Specification

NOTE: Pin Size is 0.020"inch (0.5mm) DIA ±0.05
 All Dimensions in Inches(mm)
 Tolerance Inches: x.xxx=±0.02, x.xxx=±0.010
 Millimeters: x.x=±0.5, x.xxx=±0.25



DLD Connections		
DLD-CXXX	DLD-CXXXLW	Function
1&2	1(Black)	-V Input
3	3(White)	Analogue DIMMING
4	4(Green)	PWM/ON/OFF
11&12	12(Blue)	-V Output
13&14	13(Yellow)	+V Output
22	22(Brown)	Vref/NP
23&24	24(Red)	+V Input

NP: No Pin for DLD-C140