



DLD SERIES

57 WATT

BUCK LED DRIVER



Features

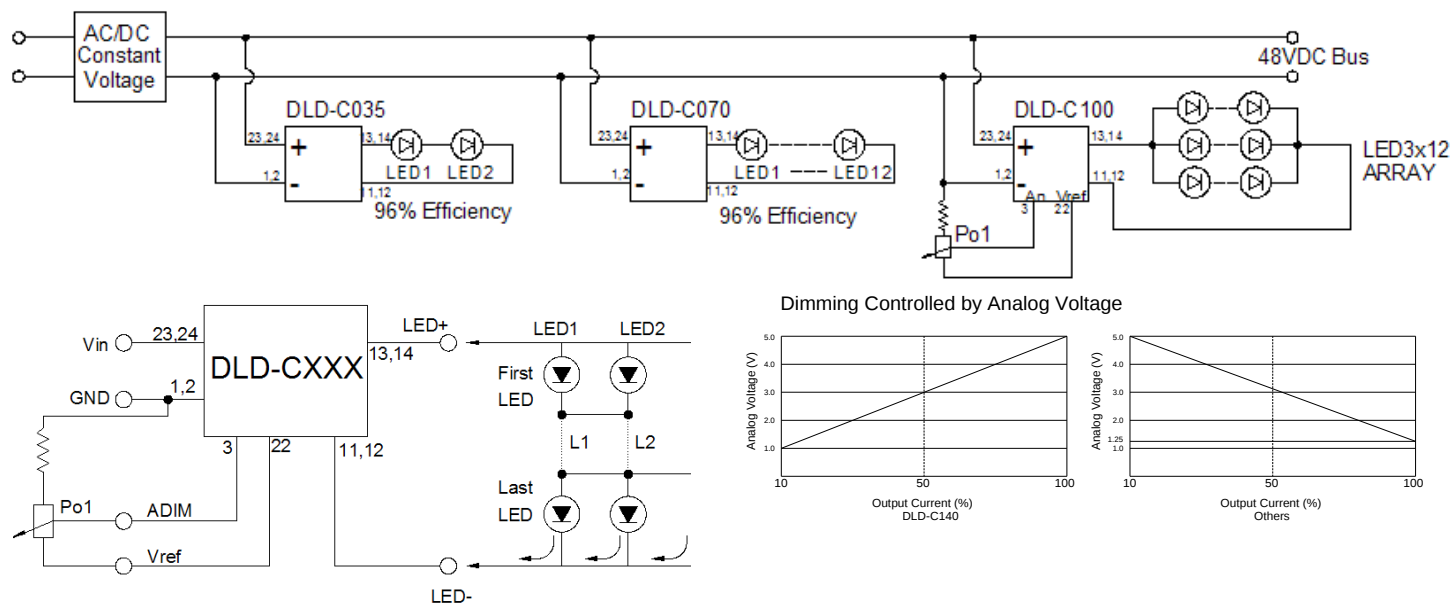
- * LED Driver Current up to 1400mA
- * Constant Current Output
- * Digital PWM Dimming
- * Analog Dimming Control
- * High Efficiency up to 96%
- * Continuous Short Circuit Protection
- * DIP16 Package and Wired Version
- * High Reliability
- * IP67 Protection



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.



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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.

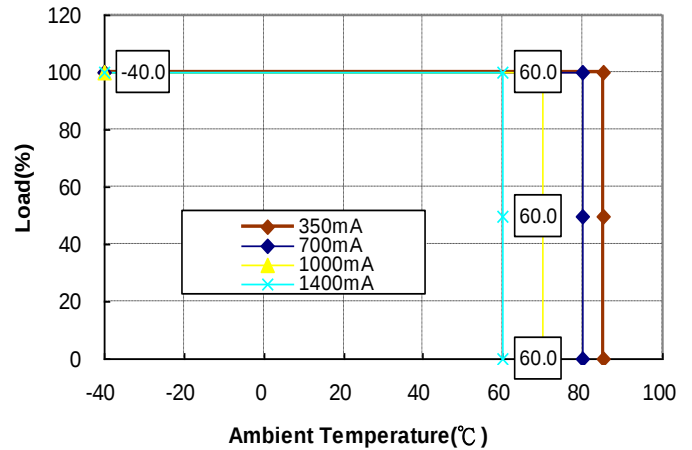
OUTPUT SPECIFICATIONS:

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:

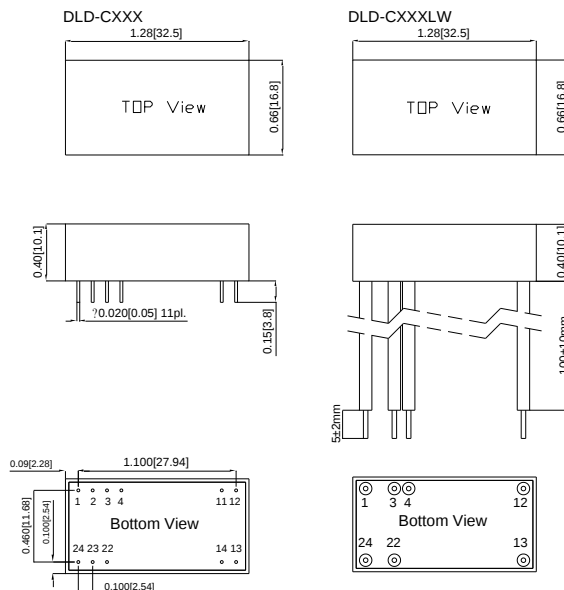
EMI EN55022/EN55015 Class B
EMS EN61547, EN61000-4-2, 3, 4, 5, 6

NOTE:

1. 3V<Vin-Vout <30Vdc to keep current accuracy.
2. Current line regulation is measured from High Line to Low Line.
3. Current load regulation is measured from high to low operating voltage.
4. 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

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