



DIM01 SERIES

DC/DC LED DRIVER WITH DALI INTERFACE MODULE



Features

- * Compatible to the DALI Standard
- * Provides Two Sets of LED Lighting Synchronization Controls
- * Adjustable Output Current
- * Waterproof design for DIM01HXXXW
- * Efficiency to 95%.



DIM01HXXXW



DIM01L&DIM01H

| MODEL Number | Input Voltage Range Note.1 | Output Operating Voltage Note.1 | Output Rated Current | Output Rated Power (max.) | Ripple and Noise(max.) Note.5 | Efficiency (Typical) Note.6 |
|--------------|----------------------------|---------------------------------|---------------------------------|---------------------------|-------------------------------|-----------------------------|
| DIM01L | 12-30Vdc | Vout1=10-26Vdc | 1000,700,550mA Note.7 | 26W | 300mVpp | 93% |
| | | Vout2=10-26Vdc | | 26W | | |
| DIM01H | 12-60Vdc | Vout1=10-56Vdc | 700,550,350mA Note.7 | 39.2W | 400mVpp | 95% |
| | | Vout2=10-56Vdc | | 39.2W | | |
| DIM01H100W | 12-60Vdc | Vout1=10-56Vdc | 1000mA | 56W | 400mVpp | 95% |
| | | Vout2=10-56Vdc | | 56W | | |
| DIM01H070W | 12-60Vdc | Vout1=10-56Vdc | 700mA | 39.2W | 400mVpp | 95% |
| | | Vout2=10-56Vdc | | 39.2W | | |
| DIM01H055W | 12-60Vdc | Vout1=10-58Vdc | 550mA | 31.9W | 400mVpp | 95% |
| | | Vout2=10-58Vdc | | 31.9W | | |
| DIM01H035W | 12-60Vdc | Vout1=10-58Vdc | 350mA | 20.3W | 400mVpp | 95% |
| | | Vout2=10-58Vdc | | 20.3W | | |

Specifications

INPUT SPECIFICATIONS:

Input Voltage DIM01H 12-60Vdc
 DIM01L 12-30Vdc
 Input Surge Voltage (1second) 65Vdc max.

OUTPUT SPECIFICATIONS:

Constant Current Accuracy(Note.2) ±5% max.
 Current Line Regulation (Note.3) ±5% max.
 Current Load Regulation (Note.4) ±5% max.
 Short Circuit Protection Auto Recovery
 Start up time 10ms max.

GENERAL SPECIFICATIONS:

Efficiency See Table
 Isolation Voltage Non-isolation
 Switching Frequency 270KHz typ.
 Operating Ambient Temperature -40°C~85°C(See Derating Curve)
 Cooling Natural Convection
 Storage Temperature -55°C to +105°C
 Humidity 95% RH max. Non condensing
 MTBF MIL-STD-217F, GB, 25°C, Full Load 400K hrs typ.
 Dimensions 3.31×1.89×0.70 inches (84.0×48.0×17.8 mm)
 Weight DIM01HXXXW100g
 DIM01H&DIM01L40g
 Case MaterialPlastic Case

DALI Control:

Output Current 10%-100%

Note:

- Nominal Input Voltage: 48Vdc(DIM01H), 24Vdc(DIM01L)
 Nominal output Voltage: 36Vdc(DIM01H), 18Vdc(DIM01L)
- 4Vdc < Vin-Vout < 30Vdc to keep current accuracy.
- Current Line regulation is measured from high line and Low Line.
- Current Load regulation is measured from high to low operating voltage.
- Ripple and Noise are measured at rated current, Nominal Input and Nominal output And 20MHz bandwidth with a 0.1uF ceramic capacitor.
- Measured at rated current, Nominal Input and Nominal output.
- Ex. using a jumper to connect PIN1 and PIN6 of CN3, CN4 to set output rated current to 1000mA for DIM01L. And using a jumper to connect PIN2 and PIN5 of CN3, CN4 to set output rated current to 550mA for DIM01H.
 Where the output rated current don't need to be the same for Vout1,Vout2.

DIM01 Series Derating Curve

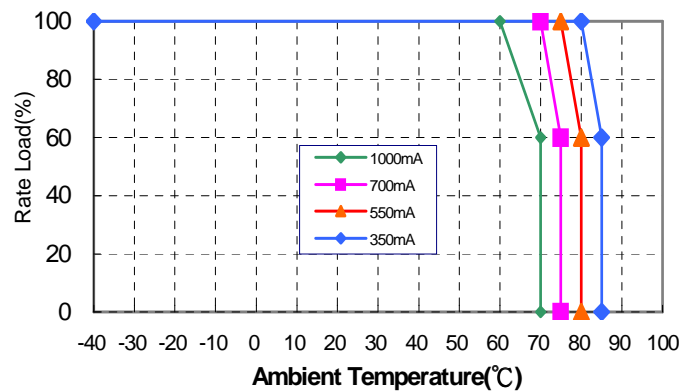
DIM01L Derating Curve



DIM01H Derating Curve



DIM01HXXXW Derating Curve



| MODEL | CN3,CN4 | Vout1,Vout2 Output Rated Current |
|-------|-----------------|-------------------------------------|
| | PIN1,PIN6 Short | 1000mA |

Mechanical Specification

All Dimensions In Inches[mm]

Tolerance Inches:x.xx= ±0.02, x.xxx= ±0.010
 Millimeters:x.x= ±0.5, x.xx=±0.25



DALI installation cable

Installation Drawing

| Cable length | min. cable cross-section (AWG) |
|-------------------------------|--------------------------------|
| up to 100 m (325 ft) | 0.5 mm ² (#20) |
| 100...150 m (325...492 ft) | 0.75 mm ² (#18) |
| 150...300 m (492...984 ft) | 1.5 mm ² (#16) |

DALI Controller

