



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





S027W-038C1000-R01-UN-DA1

27W Programmable Driver



Electrical Specifications

Maximum Power:	27W
Typical Efficiency:	83%
Input Voltage Range:	108-305 Vac
Frequency:	47/63 Hz
Power Factor:	>0.90 @ >75% Output Load
Inrush Current:	15A @ 120V 143ms@50% Ipk 35A @ 277V 157ms@50% Ipk
Input Current (Max):	1.45A @ 120Vac 0.6A @ 277Vac
Output Dimming Range	10-100%
Load Regulation:	±5%
Line Regulation:	±5%
THD:	<20%
Start Up Delay Time:	<1,000ms @ 100% load
Output Ripple Current:	<10% Io

Protections

Over-voltage:	Auto Recovery
Over-current:	Auto recovery
Short Circuit:	Latch-off
Over-temperature:	Reduce Output To 10% @ Tc ≥ 100°C Tc

Environmental Specifications

Max Case Life Temp: (5 year warranty)	80°C
Maximum Case Temp:	80°C
Minimum Starting Temp:	-40°C
Storage Temperature:	-40°C to +85°C
Humidity:	10% to 90%
Cooling:	Convection
Vibration Frequency:	10-150 Hz/1.5g
Sound Rating:	Class A (Energy Star)
Weight:	21 oz (600g)

- Multiple Dimming Control Types: 1-10V, DALI, Schedule
- Dim-to-off mode (DALI)
- Programming Functions:
 Programmable Output Current (POC),
 Lumen Output Compensation (LOC),
 Constant Power Control (CPC),
 Temperature Protection Control (TPC)
- Programs with TRP Configurator and Wired Programming Module
- Programming doesn't require power to the driver
- Metal case, fully potted
- 5 year warranty*



Part	Model	Adj. Current Out (mA ±5%)	Voltage Out (Vdc)	Max Power (W)	Wire Entry
93057523	S027W-038C1000-R01-UN-DA1	200-1000	10-38	27	Ends

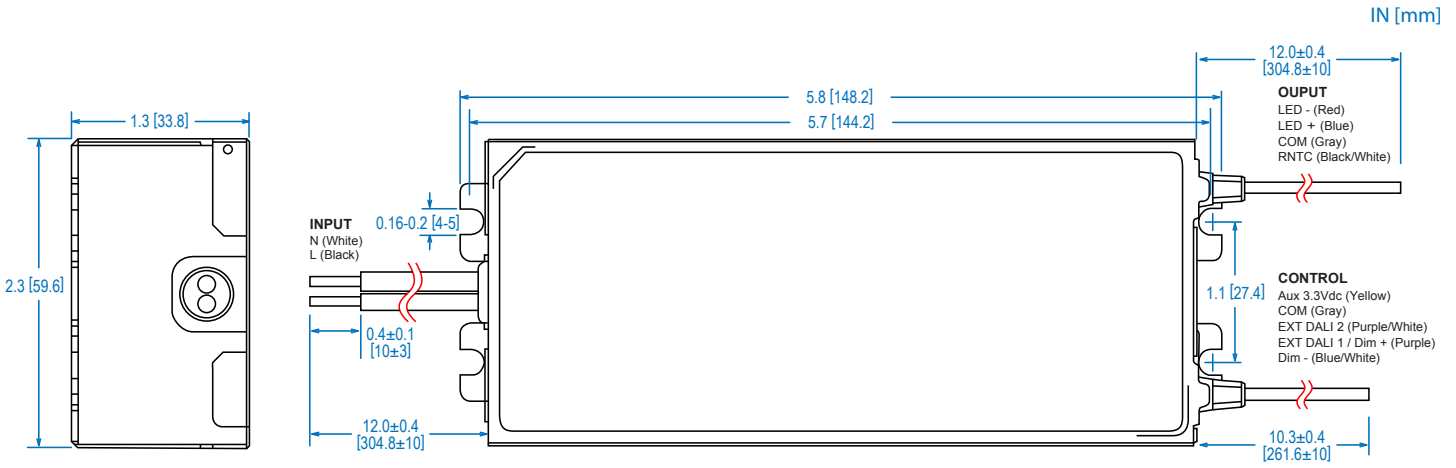
Class 2: US/Canada

Safety Cert.	Standard
UL/CUL	UL8750, UL1012
EMC Standard	Notes
FCC Part 15	Class B

* For extended warranty options beyond 5 yrs., contact factory.



Dimensions



Case must be grounded in end-use application.

WIRE SPECS:
Control Leads: UL1569, 20AWG, 10.3", 600V, 105°C
Input & Output Leads: UL1569, 18AWG, 12", 600V, 105°C.
Stranded Copper Wire
All stripped leads are copper dipped.

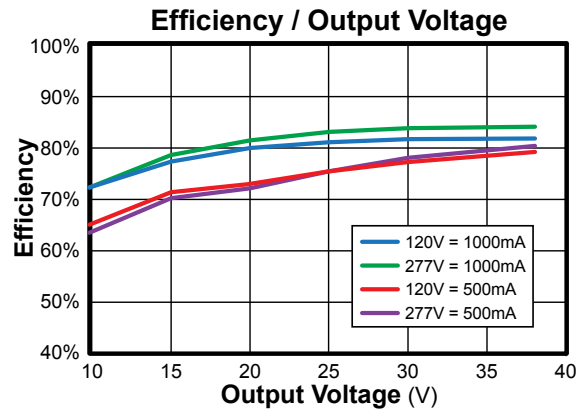
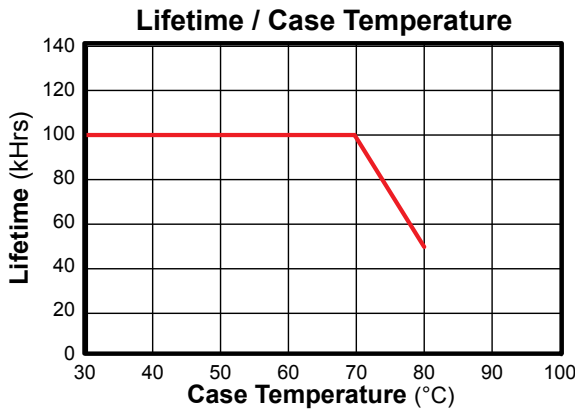
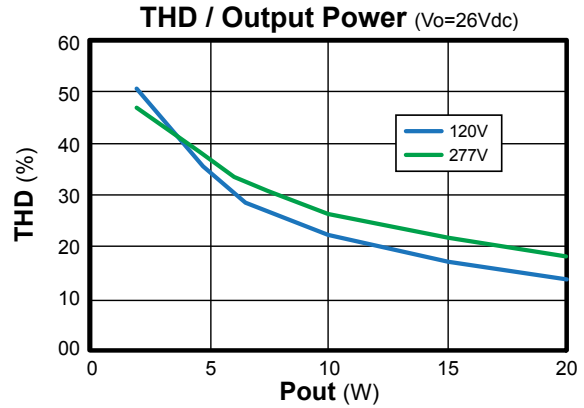
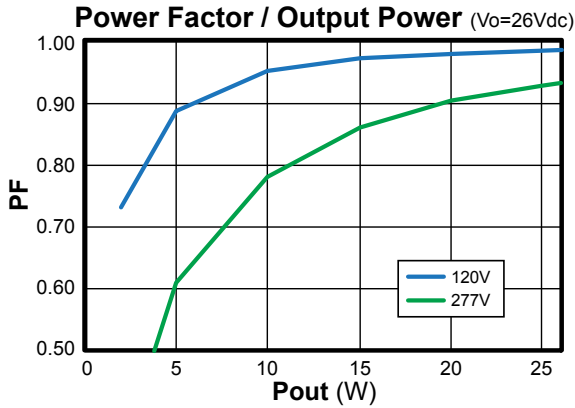
Remote Mounting:
Output Wires Max Distance 10m
Control Wires Max Distance 0.5m
For connector options contact factory.

Parameter Defaults

Parameter	Default Setting	Setting Range	Increment
Output Current (mA)	1000	200 - 1000	1
Enable Analog Dimming	No	Yes or No	
DALI Dimming Curve	Logarithmic	Linear or Logarithmic	
0-10V Minimum Level (%)	10	10 - 100	1
Enable NTC	No	Yes or No	
NTC-Derating Temperature Start (°C)	50	50 - 85	1
NTC-Derating Temperature Stop (°C)	70	55 - 95	1
NTC-Max Temperature (°C)	100	60 - 105	1
NTC-Minimum Derating Level (%)	90	10 - 90	1
Enable DALI Interface	Yes	Yes or No	

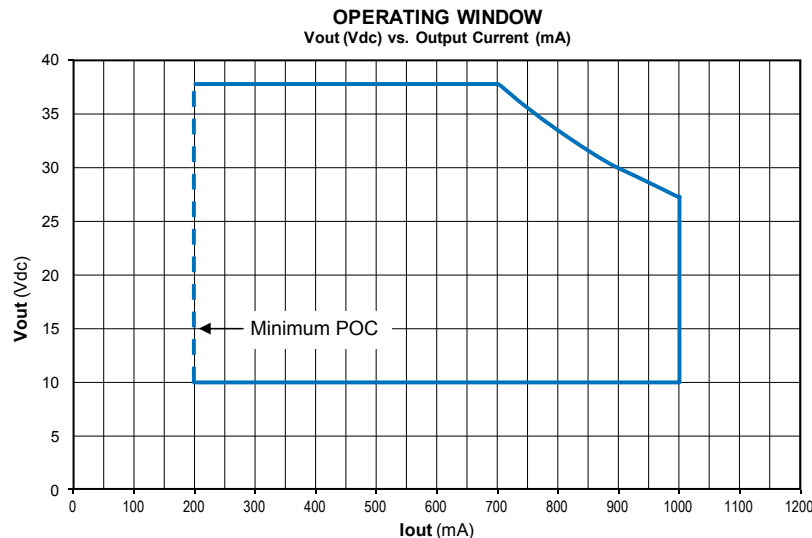


Power Characteristics



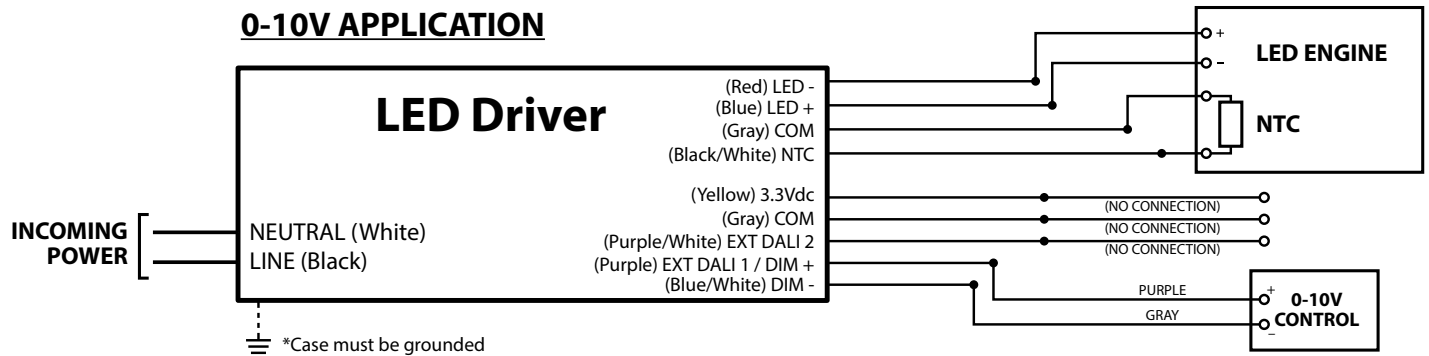
Note: The area under the life-temperature curve represents where the driver has highly reliable operation within specification. Driver performance may drift out of published specifications as the hours of operation exceed the curve at a given temperature. Higher operating temperatures increase the chances of a failure to function. Other electrical, mechanical and environmental factors affect driver lifetime but are not represented in this calculation.

Power Operating Window

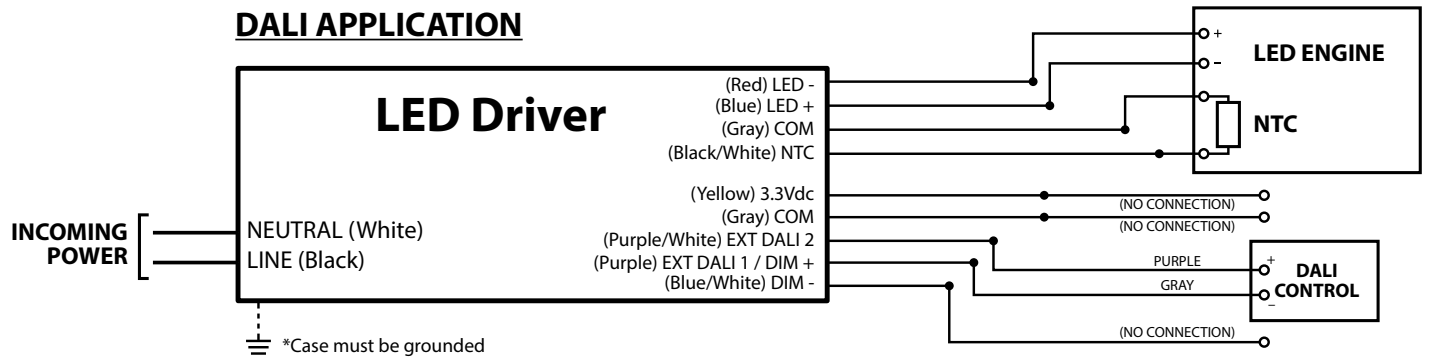


Wiring

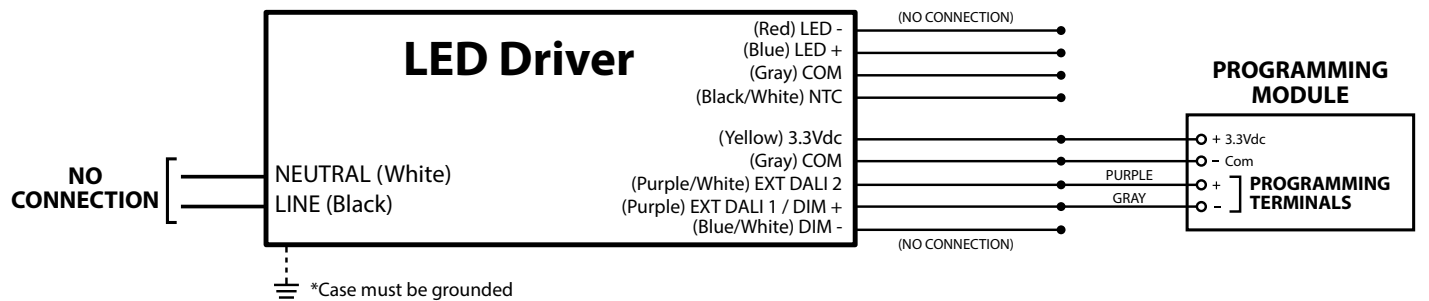
0-10V APPLICATION



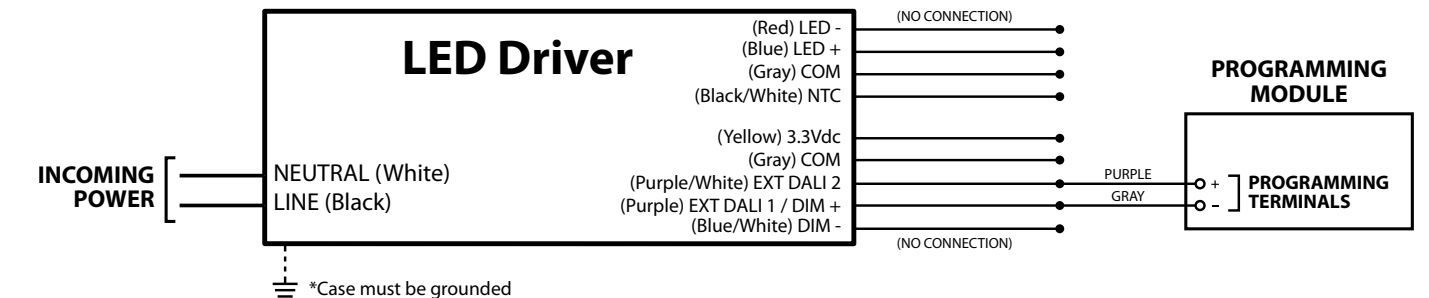
DALI APPLICATION



PROGRAMMING MODE #1



PROGRAMMING MODE #2



Programming Guide

Dimming Interface

Parameters	Min	Max	Notes
DALI	0% (Off)	100%	IEC 62386-102-207(Ed1.0)
1-10V	10%	100%	Input range: 1-8V
Schedule Dimming	10%	100%	Up to 5 steps. Min step: 1%

Temperature Protection Control (TPC)

Parameters	Min	Max	Notes
T start	50°C	85°C	Temperature @ Dim start
T stop	55°C	95°C	Temperature @ Dim stop
T max	60°C	105°C	Temperature @ Dim off
TPC tolerance	-3°C	3°C	Temperature @ TPC range
Protection Dim Level	10%	90%	Dim Level @ T stop

Lumen Output Compensation (LOC)

Parameters	Min	Max	Notes
Working Hours (Max 16 steps)	0 kHrs	127.5 kHrs	Min step: 500 hrs.
Dim Level (Max 16 steps)	10%	130%	Min step: 1%
Operating Time Accuracy	-4%	4%	

Schedule Dimmer

Parameters	Min	Max	Notes
Dimming Schedule	1min	5min	Min step: 1min
Dim Level	10%	100%	Min step: 1%
Override Hold Time	0	60min	Min step: 1min
Midnight Shift	-120min	120min	Min step: 1min

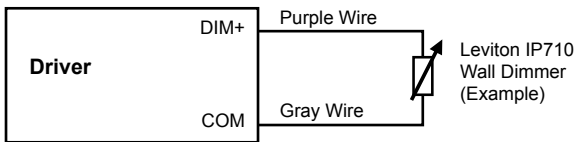
Labeling Programmable Drivers

It is highly recommended that the drivers be labeled with information traceable to the programmed current and feature configuration. **This information is critical to answering any field questions from the contractor or end user.**

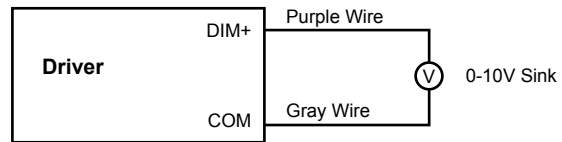
Dimming: 0-10Vdc

Parameters	Minimum	Typical	Maximum
Source Current out of 0-10V Purple Wire	0 mA	---	1.5 mA
Absolute Voltage Range on 0-10V (+) Purple Wire	-2.0 V	---	+15 V

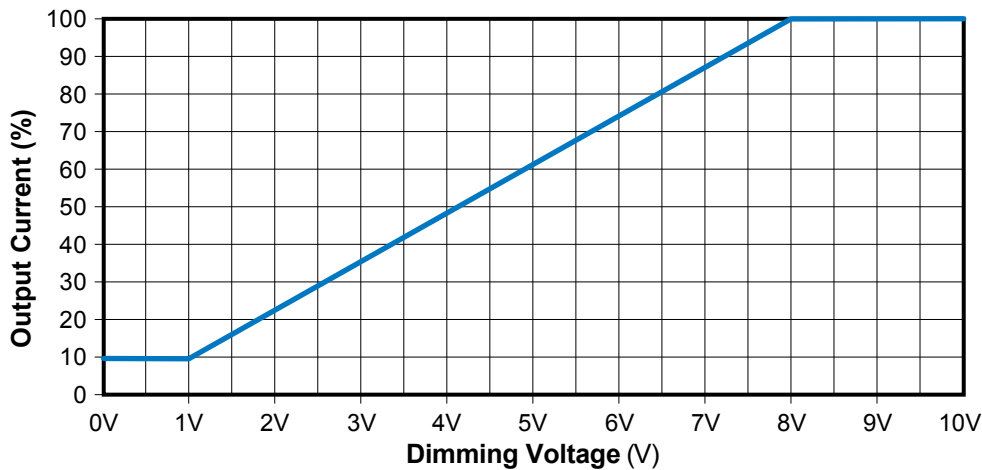
Typical Dimming Circuit: 2-Wire Resistance



Typical Dimming Circuit: 2-Wire 0-10V Analog



Output Current / Dimming Voltage



0-10V Dimming Notes:

1. Part comes with two dimming input connectors +Purple/-Gray on the output side.
2. Part is compatible with most 0-10V Wall Slide dimmers and 0-10V dimming.
3. Output current will be 10% when $V_{dim} \leq 1.0V$.
4. Output will be 100% with Purple/Gray open and 10% with Purple/Gray Shorted.