



# S050W-052C1400-L03-UN-D2

50W Programmable Driver



## Electrical Specifications

Maximum Power:	50W
Typical Efficiency:	87%
Input Voltage Range:	120-277 Vac ± 10%
Frequency:	50/60 Hz
Power Factor:	> 0.90 @ 80-100% load, 120-277Vac
Inrush Current:	33A @ 120V, 79A @ 277V
Input Current (Max):	0.6A @ 120Vac, TBD @ 277Vac
Output Dimming Range:	1-100% (14mA @ Max POC)
Load Regulation:	5%
THD:	<20% @ 80-100% load, 120-277Vac
Start Up Time	<1,000ms @ 100% load
Output Ripple Current:	156kHz, meets CEC Title 24, flicker-free

## Protections

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

## Environmental Specifications

Max Case Life Temp (5yr Warranty):	75°C
Maximum Case Temp (UL):	80°C
Minimum Starting Temp:	-30°C
Storage Temperature:	-30°C to +85°C
Humidity:	10% to 90%
Cooling:	Convection
Vibration Frequency:	3 Axis 10-150Hz, 2g
Sound Rating:	Class A
Weight:	12.8 oz (362.8 g)

- Constant Current, Dimmable
- Programmable Output Current (POC): 400mA to 1400mA
- Dim-to-off mode
- Flicker-free output
- Auxiliary output: 12Vdc, 100mA max
- 0-10V dimming, down to 1% at max POC
- UL Dry & Damp Location Rated, Class 2 output
- Class P
- NFC Programming with universal NFC reader for flexible and precise tuning
- Narrow cross-section fits T5-style ballast channels
- Metal housing
- 5 year warranty\*

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



Part	Model	Adj. Current Out (mA ±5%)	Voltage Out (Vdc)	Max Power (W)	Wire Entry
93057525	S050W-052C1400-L03-UN-D2	400-1400	20-52	50	Ends

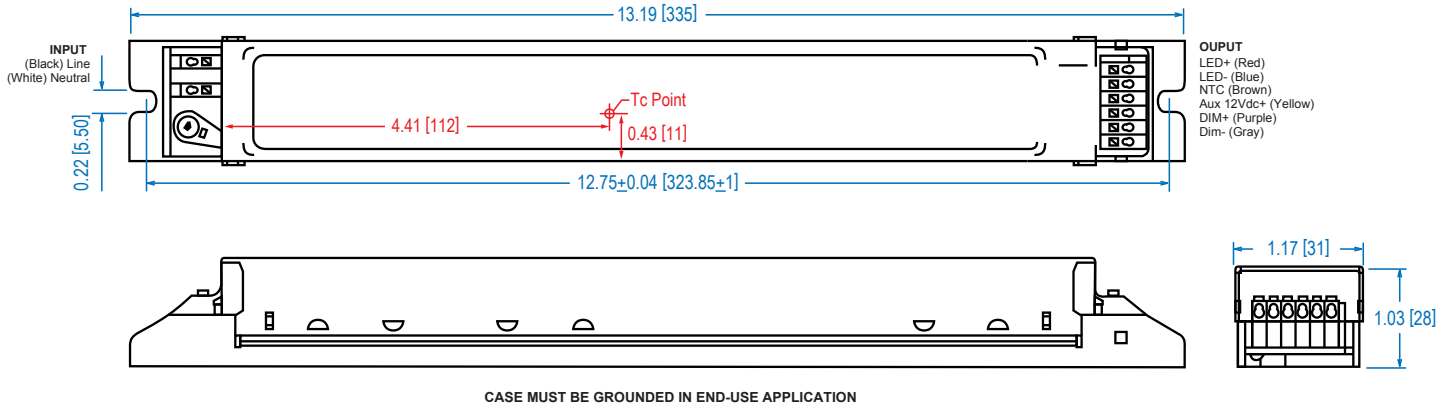
Class 2: US/Canada

Safety Cert.	Standard
UL/CUL	UL8750, UL1310 for UL Class 2 & CAN/CSA C22.2 No. 250.13, UL Class P
CE	EN61347-1, EN61347-2-13
EMC Standard	Notes
FCC, 47CFR Part 15	ANSI C63.4:2014, Class A
EN 61000-3-2	Harmonic Current Emissions Class C
EN 61000-4-5	Part 4-5: Surge Immunity test, 2 kV L-N, 4 kV L-FG & N-FG



**Dimensions**

IN [mm]

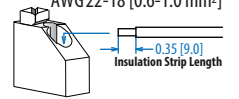


**Remote Mounting:**

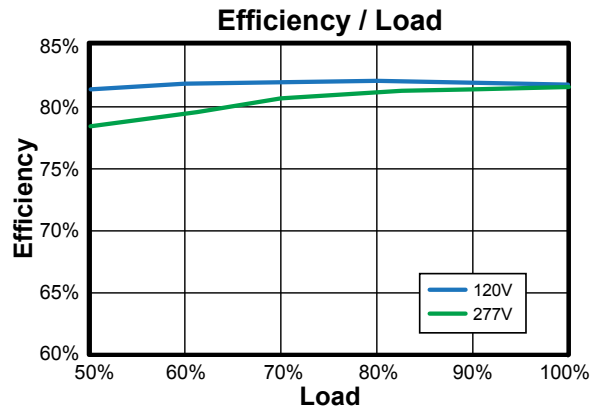
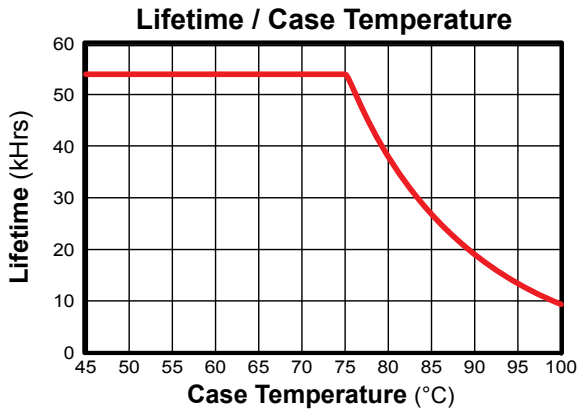
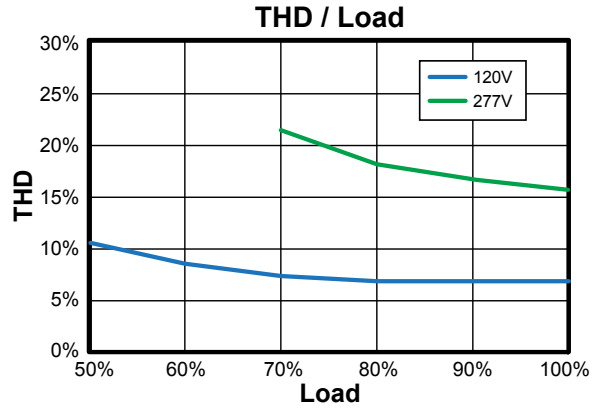
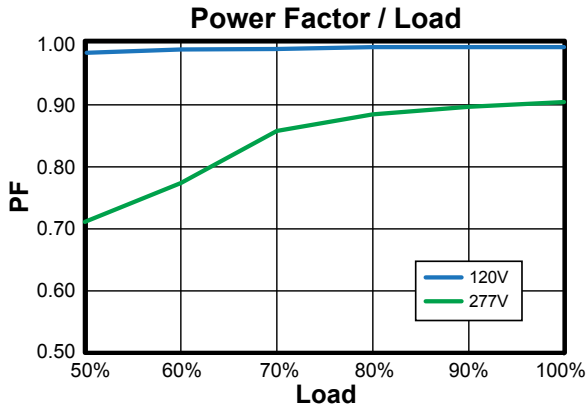
Max Distance 26ft. using #18 AWG

**PUSH IN CONNECTORS**

**Wire Gauge:** Solid Copper  
AWG 22-18 [0.6-1.0 mm<sup>2</sup>]



### Power Characteristics

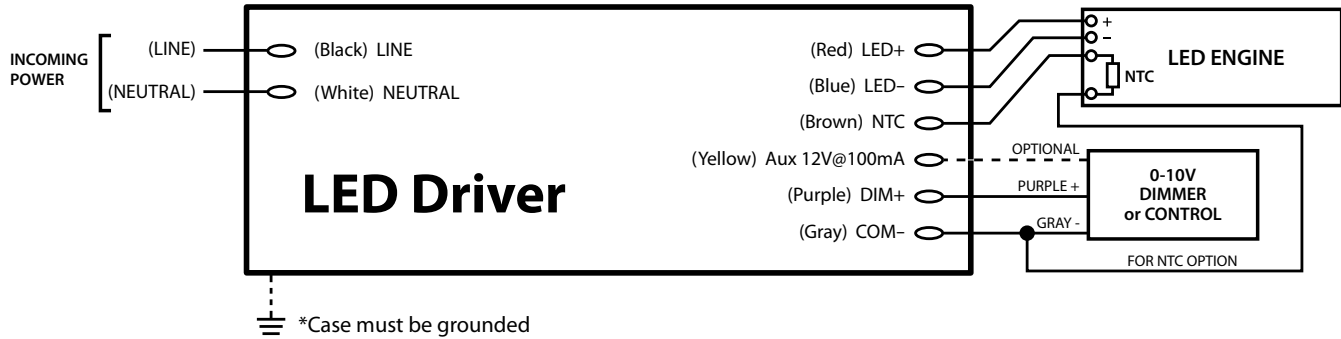


### Parameter Defaults

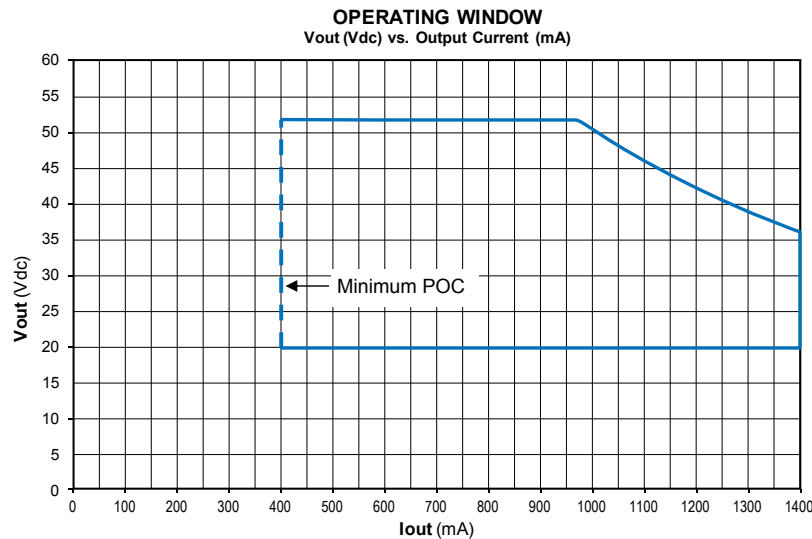
Parameter	Default Setting	Setting Range	Increment
Output Current (mA)	1400	4000 - 1400	1
Analog Dimming Low Level (%)	1	0 - 100	1

**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.

### Wiring



### Power Operating Window



### Programming Guide

#### Lumen Output Compensation (LOC)

Parameters	Min	Max	Notes
Working Hours (Max 16 steps)	0 Hr	127.5 kWhrs	± 4%, Min step: 500 hrs.
Dim Level (Max 16 steps)	10%	130%	Min step: 1%

#### Dimming Interface

Parameters	Min	Max	Notes
1-10V	1%	100%	Min step: 1%
Schedule Dimming	Off/5% If Set On	100%	Min step: 1%

#### Temperature Protection Control (TPC) - Use with external NTC Resistor

Parameters	Min	Max	Notes
T start	50°C	85°C	Min step: 1°C, Temp. @ Dim start
T stop	55°C	95°C	Min step: 1°C, Temp. @ Dim stop
T max	60°C	105°C	Min step: 1°C, Temp. @ Dim off
TPC tolerance	-3°C	3°C	Tolerance @ Tstart, Tstop, Tmax
Protection Dim Level	10%	90%	Min step: 1%, Dim Level @ T stop

\*Note: External TPC is settable based on NCP18XH103 or equivalent thermistor (10kΩ at 25°C).

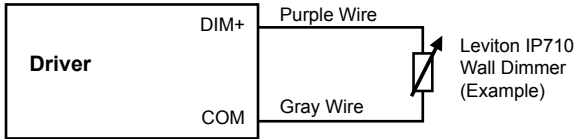
### Labeling Programmable Drivers

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.**

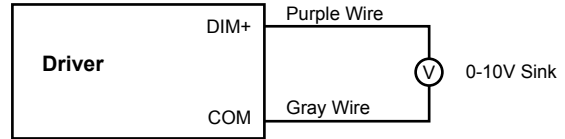
### Dimming: 0-10Vdc

Parameters	Minimum	Typical	Maximum
Source Current out of 0-10V Purple Wire		---	85 $\mu$ A
Absolute Voltage Range on 0-10V (+) Purple Wire		---	

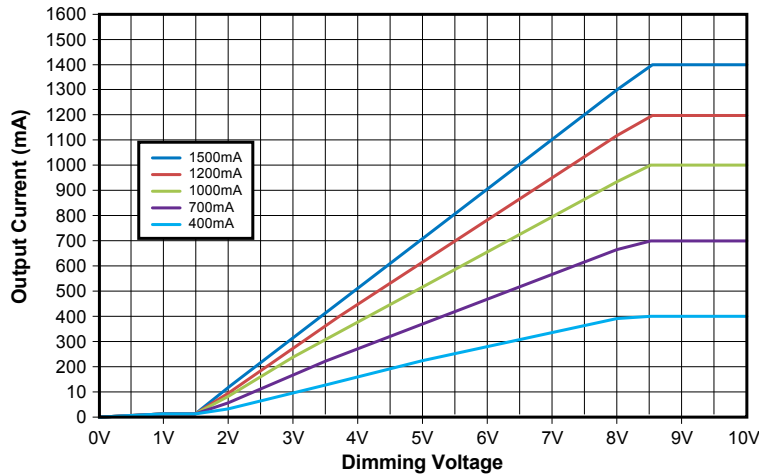
#### Typical Dimming Circuit: 2-Wire Resistance



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



#### Dimming Control (0-10V Dimming)



#### 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 0% when  $V_{dim} \leq 0.70V$ .
4. Output will be 100% with Purple/Gray open and 0% with Purple/Gray Shorted.