



KTLD-25-UV-SC1050-56-VDIM-AQ7

CONSTANT CURRENT PROGRAMMABLE LED DRIVER

DESCRIPTION

LED Driver | 25W | 120-277V Input | 350-1050mA Programmable Output Current



TOTAL POWER: 25W	OUTPUT CURRENT: 350-1050mA
INPUT VOLTAGE: 120-277Vac $\pm 10\%$	DIMMING: 0-10V
INPUT FREQUENCY: 50/60 Hz	WARRANTY: 5 Years



PRODUCT FEATURES

- Meets FCC Part 15 (Class B) consumer limits
- Short circuit overload and open load protection
- Dimmable with 0–10V dimmer (down to 1% at max. output current)
- THD: < 20%
- Programmable output current via Keystone supplied programming jig
- -40°C/-40°F to 50°C/122°F operating temperature
- 90°C/194°F maximum case temperature
- Input frequency: 50/60 Hz
- Class A Sound Rating

PROGRAMMING FEATURES

- Drive Current (10mA Increments)
- Minimum Dimming Level (1%,3%, 5%,7%, or 10%)
- Dimming Curve (Linear, Log, Inverse Log, or Square-law)
- Minimum Dimming Voltage (1V, 1.5V, or 2V)
- Maximum Dimming Voltage (7V, 8V, or 9V)
- Dim-to-off Voltage (.8V, 1V, 1.2V, or N/A)
- Thermal Foldback Temperature (75°C, 80°C, 85°C, or 90°C)

WHAT'S NEEDED? A SmartCurrent Programmable LED Driver, the SmartCurrent Cradle, and a computer.



REQUIRED ACCESSORIES

Order Code	Description
KTLD-SC-ADPT-1D	AQ7 Case Adapter for Smart Current Programming Cradle
KTLD-SC-PGMR-1	Smart Current Programming Cradle with Micro-USB Cable

ELECTRICAL SPECIFICATIONS

Input Voltage Range	120-277Vac $\pm 10\%$
Frequency	50/60 Hz
Power Factor	>0.9 under 120~277Vac Input with 80~100% Load Condition (For All Output Currents)
Inrush Current	20A @277V
Max. Input Current	TBD
THD	< 20% under 120~277Vac input with 80~100% load condition (For All Output Currents)
Load Regulation	$\pm 2\%$
Line Regulation	$\pm 1\%$
Output Tolerance	$\pm 5\%$ at Full Load Condition, $\pm 10\%$ for Aux 12Vdc
Turn-On Delay Time	< 0.5 Seconds at 50~100% load, input 120V
Overshoot	< 10% at Full Load Condition
No Load Power Consumption	< 1W
Ripple and Noise (pk-pk)	< 3%
Withstand Voltage	Input to output, 2,800Vdc, 2mA
Surge Rating	2.5KV for Combination Wave / Ring Wave
Leakage Current	Maximum 0.5mA at 277Vac, 60Hz input
Protection	<ul style="list-style-type: none"> • Over Voltage Protection: Hiccup mode. Protection will trigger when load voltage exceed specified output voltage and will auto recover after the fault mode is removed. • Over Current Protection: Hiccup mode. Protection will trigger when load current exceed specified output current and will auto recover after the fault mode is removed. • Short Circuit Protection: Hiccup mode. Protection will trigger when short circuit and will auto recover after the fault mode is removed. • Over Temperature Protection: Protection will trigger when driver overheat and auto-recovery when cooled down.



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PRODUCT SPECIFICATIONS

Max. Output Power	Output Current	Output Voltage	OCV	Typical Efficiency at 120V	Typical Efficiency at 240V	Typical Efficiency at 277V	Remote Mounting Distance (#18 AWG)	Class 2	
								US	Canada
25W	350-1050mA	10-56V	60V	TBD	TBD	TBD	13 ft.	3	

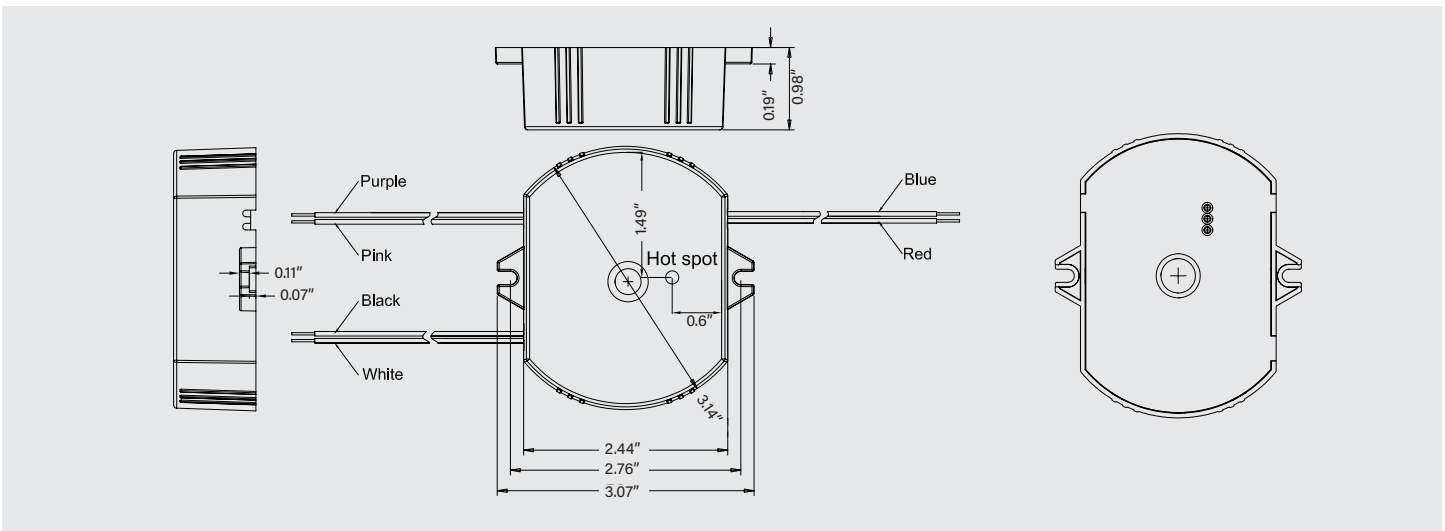
PHYSICAL SPECIFICATIONS

	LENGTH	3.15"
	WIDTH	3.07"
	HEIGHT	1.00"
	MOUNTING	2.76"
	CASE STYLE	AQ7
	CASE MATERIAL	Plastic

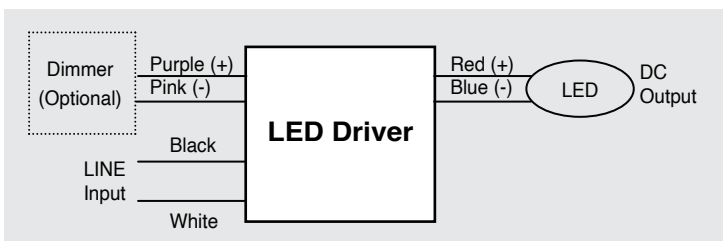
WIRING SPECIFICATIONS

INPUT	12", UL 1316 #18AWG (Black and White)
OUTPUT	12", UL 1316/1430 #22AWG (Red and Blue)
DIMMING	12", UL 1316/1430 #22AWG (Purple and Pink)

WIRE SPECIFICATIONS



WIRE DIAGRAM

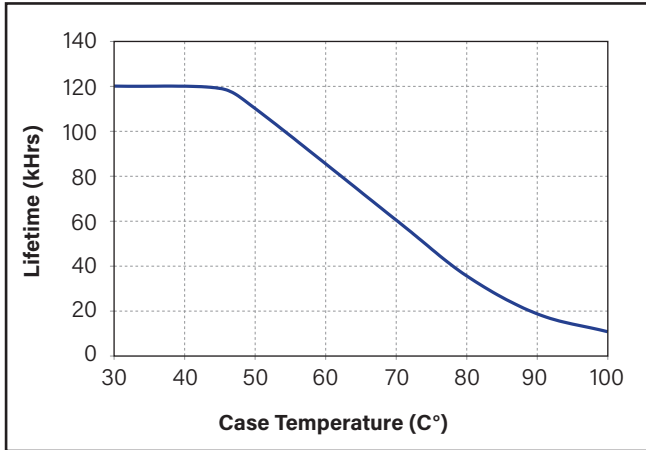




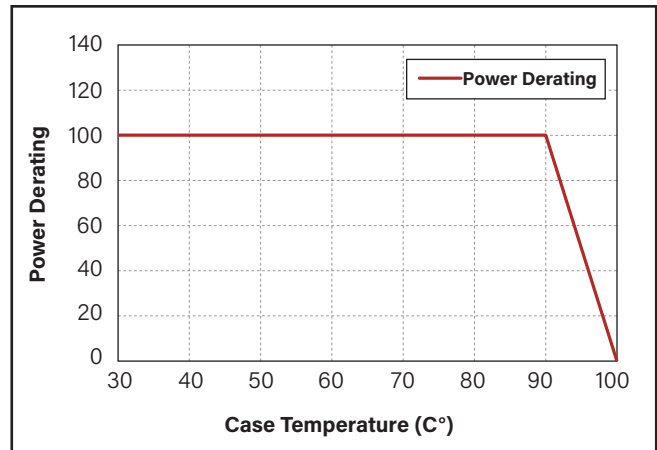
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CONSTANT CURRENT PROGRAMMABLE LED DRIVER

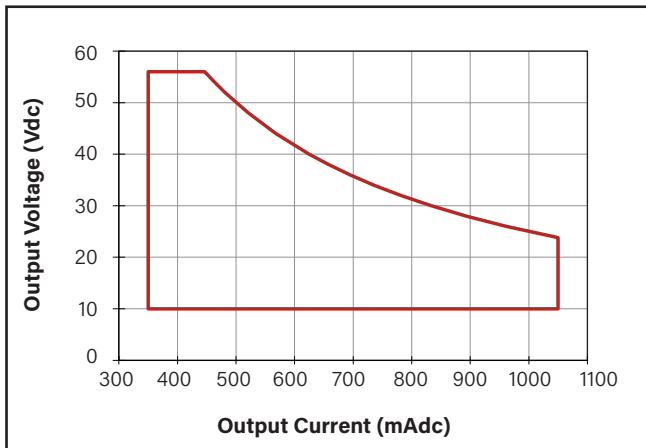
LIFETIME VS CASE TEMPERATURE



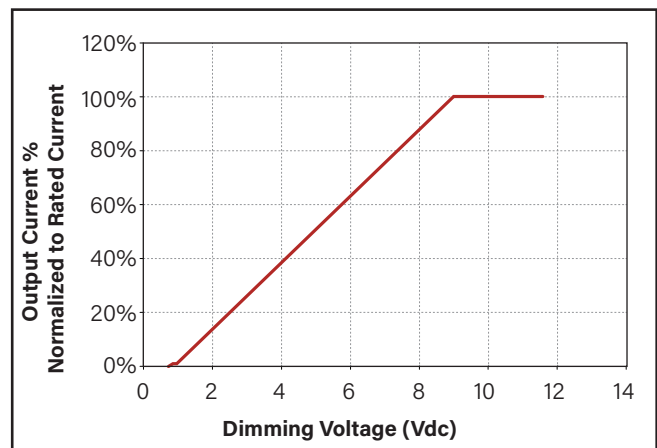
POWER DERATING VS CASE TEMPERATURE



LED DRIVER OUTPUT WINDOW



DIMMING CURVE





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ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40 to 50°C
Storage Temperature	-40 to 85°C
Humidity	5% to 95%
MTBF	TBD
Life Rating	85,000 hours at 120Vac input, 100% load and 60°C case temperature
Maximum Case Temperature	90°C
Maximum Case Temperature (tc) for 5-Year Warranty	75°C/167°F

SAFETY AND EMC COMPLIANCE

UL/cUL	UL 8750 pending, Class P, UL1310 Class 2
CE	EN61347-1, EN61347-2-13
FCC, 47CFR Part 15	ANSI C63.4:2009 Class B (Consumer Limit)
EN61000-3-2	Harmonic Current Emissions Class C

ORDERING INFORMATION

Order Code	Packaging Style	UPC	Easy Code
KTLD-25-UV-SC1050-56-VDIM-AQ7	Carton Pack	843654151632	EAM-63

CATALOG NUMBER BREAKDOWN

KTLD-25-UV-SC1050-56-VDIM-AQ7

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- 1** Keystone Technologies LED Driver
- 2** Max. Output Wattage
- 3** 120-277V Input
- 4** Smart Current
- 5** Max. Output Current
- 6** Max. Output Voltage
- 7** 0-10V Dimming
- 8** Case Style