



# KTLD-50-1-1450-AR2

## LED DRIVER



Constant current LED driver
Total power: 50W
Input voltage: 120Vac $\pm$ 10%
Number of outputs: One
UL Listed, Class P
IP20 or IP66 design
5 year warranty

### ELECTRICAL SPECIFICATIONS

Input voltage range:	120Vac $\pm$ 10%
Frequency:	50/60Hz
Power factor:	> 0.9 under 120Vac input with 80~100% load condition (for all output currents)
Inrush current:	10A @120V
Max input current:	0.52A @120V
THD:	< 20% under 120Vac 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
Turn-on Delay Time:	< 1s at full load condition
Overshoot:	< 10% at full load condition
No Load Power Consumption:	< 2W
Ripple & Noise (pk-pk):	< 10%
Withstand voltage:	Input to output, 2,800Vdc, 2mA
Leakage current:	Maximum 0.5mA at 120Vac, 60Hz input
Protection:	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.

### ENVIRONMENTAL SPECIFICATIONS

Operating temperature:	-40 to 60°C
Storage temperature:	-40 to 85°C
Humidity:	5% to 95%
MTBF:	302,000 hours at 40°C ambient (~70°C Case temp)
Life rating:	85,000 hours at 120Vac input, 100% load and 60°C case temperature
Maximum case Temperature :	90°C

### SAFETY AND EMC COMPLIANCE

UL/cUL	UL Listed, Class P
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

**PRODUCT SPECIFICATIONS**

Model Number	Max output power	Output Current	Output Voltage	OCV	Efficiency at 120V (Typ.)	Remote mounting distance (#22 AWG)	Class 2	
							US	Canada
<b>KTLD-50-1-1450-AR2</b>	50W	1450mA	17-34V	41V	85%	9 ft	✓	✓

**PHYSICAL DIMENSIONS**

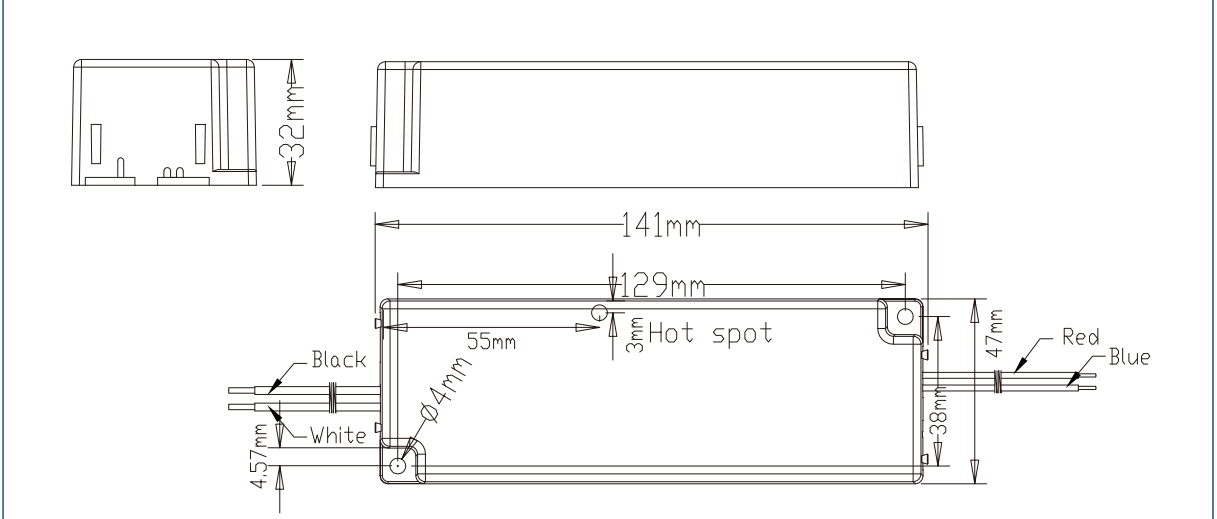
Length (L):	5.54" (141mm)
Width (W):	1.86" (47mm)
Height (H):	1.26" (32mm)
Mounting (M):	5.08" (129mm)

**PACKAGING**

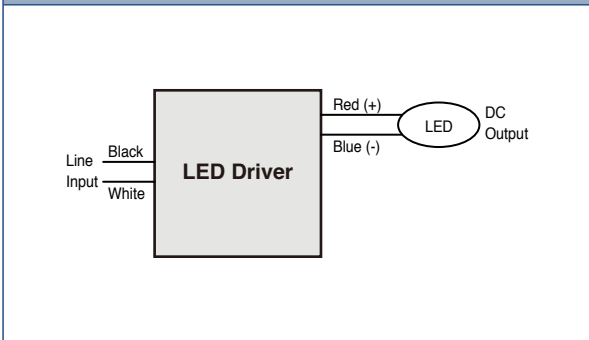
0.40kg / unit ; 40pcs / carton ; 1,800pcs / pallet	
Carton size:	490 x 195 x 155 mm
Carton weight:	17 kg
Case Material:	Plastic

**WIRE SPECIFICATIONS**

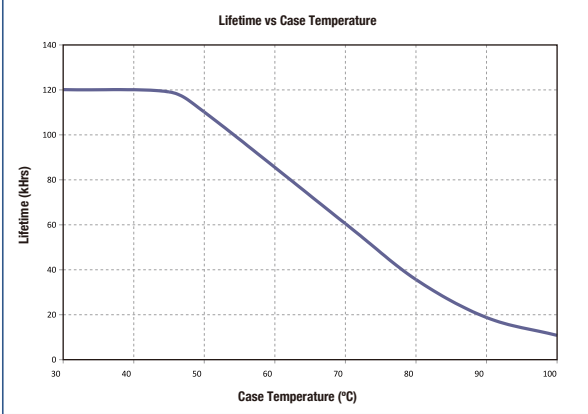
Input:	12", UL 1569 #18AWG (Black and White)
Output:	12", UL 1430 #22AWG (Red and Blue)



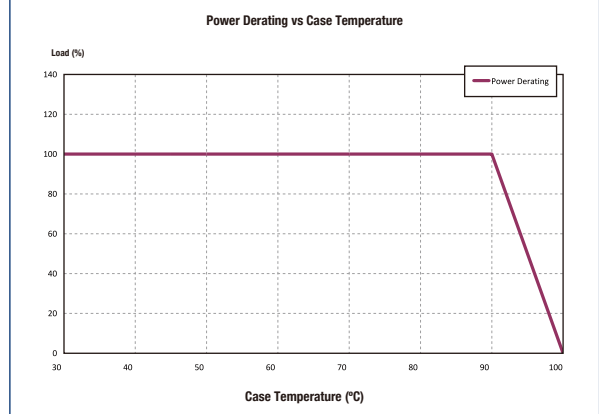
**WIRING DIAGRAM**



### LIFETIME vs CASE TEMPERATURE



### POWER DERATING vs CASE TEMPERATURE



### POWER FACTOR vs LOAD: TBD



### EFFICIENCY vs LOAD: TBD

