



60W LED POWER SUPPLY

Mini Driver Mighty Power



60W LED Power Supply

- 24V DC Constant Voltage Technology
- IP66 Dry and Damp Locations
- 120-277V AC Universal Inputs
- Suitable for LED Lighting & Moving Sign Application
- UL/cUL Sign Accessories, UL Class 2 Certified



IP66





Specifications:

Input Voltage	120-277V AC $\pm 10\%$
AC Current	0.6A/AC120V, 0.4A/AC240V, 0.3A/AC277V
Power Factor	>0.9 under 120/277VAC input with 80-100% load condition
Harmonic Distortion	$\leq 20\%$ under 120/277VAC input with 80-100% load condition
Frequency	50Hz to 60Hz
Efficiency (typ.)	89% (AC120V), 91% (AC240V-AC277V)
Inrush Current (typ.)	Cold Start, 40A/240VAC
Leakage Current	<1mA/240VAC
Ripple and Noise (max.)	1000m Vp-p (Note 2)
Setup, Rise Time (max.)	3000ms, 100ms 120V / 240V AC at full load
Hold Up Time (typ.)	2ms/120V AC at full load 2ms/240V AC at full load
Output Voltage	24V DC
Output Power	60W MAX
Output Current	2.5A

NOTE:

- 1 - All parameters not specially mentioned are measured at 240V AC input, rated load and 25°C of ambient temperature.
- 2 - Ripple and noise are measured at 200Mhz of bandwidth by using a 12" twisted pair-wire terminated with 0.1 uF & 47uF parallel capacitor.
- 3 - Refer to "DRIVING METHODS of ELECTRONIC LOAD"
- 4 - Life rating: 50,000 hours at TC $\leq 70^\circ\text{C}$ maximum case hot spot temperature.
- 5 - Maximum case temperature: $+95^\circ\text{C}$

Recommended load approximately 75% capacity of power supply for extended lifespan. Equip with protective box for outdoor use and the box should have ventilating holes.

Environment & ISO:

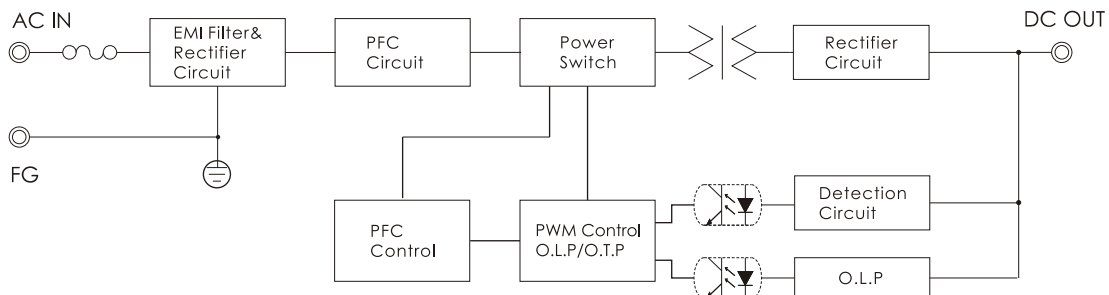
Operating Temp. & HUMID	-30°C to +50°C (Refer to DERATING CURVE, 20-95%RH)
Storage Temp. & HUMID	-40°C to +80°C 10-95%RH
Vibration Frequency	10 to +500 Hz (5G 12 min./1cycle, period for 72min. Each along Z, Y, Z axes)
Cooling	Air Convection
Over Current (note 3)	Over 105% of Rating (recovers automatically after fault condition is removed)
Short Circuit	Hiccup or shut down mode/recover (recover automatically or need reapplying power)
Over Temperature	Recovers automatically after fault condition is removed
Withstand Voltage	I/P-O/P:AC1.6KV
Isolation Resistance	I/P-O/P:DC500V 100Mohms (at room temp. & humid.)

Dimension & Weight:

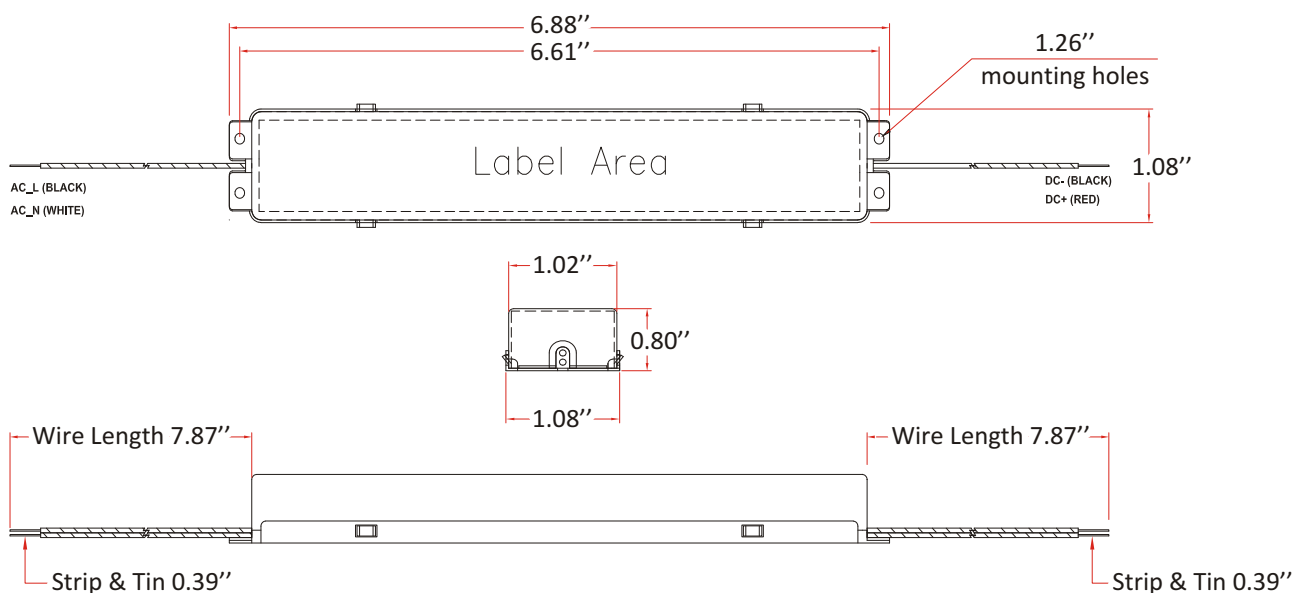
Dimensions	6-7/8" x 1-1/16" x 13/16" (L x W x H)
Weight	6.40 oz.
Input Connection	(L) Black (N) White UL 1007 18AWG
Output Connection	(+) Red (-) Black UL 1007 18AWG



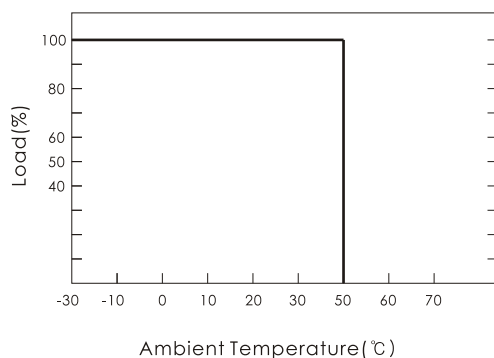
◆ BLOCK DIAGRAM:



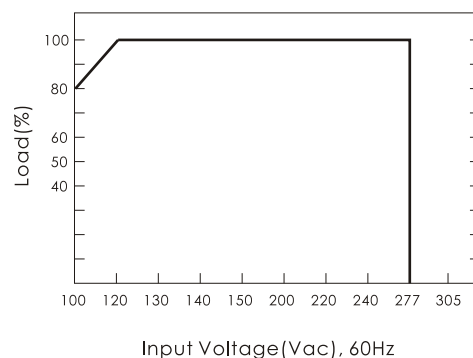
◆ DIMENSIONS:



◆ DERATING CURVE:



◆ STATIC CHARACTERISTICS:



Product Limited Warranty

MaxBrite LED is dedicated to providing defect-free products that will give the buyer years of trouble free operation. These products offer high design standards and are the most thoroughly tested in the industry. All MaxBrite LED products maintain very strict quality assurance standards that are essential to customer requirements.

MaxBrite LED warrants its LED products and Power Supply products to meet the performance criteria outlined in the written data sheets and specifications. These products are guaranteed to be free from defects in materials and workmanship for the warranty period stated below, as long as the MaxBrite LED products and Power Supplies are used together as a system. If any LED product or Power Supply fails to perform, as specified during the warranty period in accordance with the terms and conditions set forth herein, MaxBrite LED will replace, or at its discretion, repair free of charge, the non-performing product on a pro-rata basis.

Terms and Conditions

Usage

This limited warranty is based on reasonable indoor or outdoor usage in architectural applications for image identification, when installed and used in accordance with instructions from MaxBrite LED. Normal operating conditions are defined as 24 hour per day, 7 day per week continuous use in typical outdoor heat and humidity environmental conditions. All LED systems, to varying degrees, have some amount of light degradation over the life of the product. MaxBrite LED designs all of its LED systems to minimize this light degradation but considers this a normal part of LED technology. This limited warranty is valid only when the LED products and Power Supplies are used together for their intended use and properly installed and wired in accordance with all instructions, building codes, the latest Underwriter Laboratory Standards of Safety, National Electric Code, Canadian Standards Association, and all other domestic and international safety agencies that are recognized as having applicable safety requirements. Any use outside intended use or conditions or the conditions stated in MaxBrite LED written data sheets and instruction, or stated herein, including the use of third party dimming, flashing or other effect devices, extreme environmental conditions or any other unintended usage will void this warranty. Replacement of MaxBrite LED products or Power Supplies with any other manufacturer's components will further void this warranty. After the first 36 months, the warranty is held on a pro-rata basis. The pro-rata formula is as follows: $\frac{P * T}{W}$

Where P = Current price, T = Remaining term in months, W = The original warranty period in months.

EXAMPLE:

An approved warranty claim is made within 36 months of purchase, with an original purchase price of \$100, and a 5 year warranty. MaxBrite is responsible for 100% of the replacement cost since it is within 36 months of purchase.

If the same warranty claim is made within 48 months on the warranty, customer is responsible for $\frac{100 * 48}{60} = \$80$ for the replacement.

The "date of purchase" refers to the date on your sales invoice. If you cannot find your sales invoice, the date will be calculated based on the date of manufacture which is determined by your product's serial number.

Warranty Claim Assistance

Should a MaxBrite LED product fail under this warranty please contact MaxBrite LED for a Return Material Authorization number (RMA). An RMA number may be obtained by calling customer service at (408) 437-1600. Information and troubleshooting assistance is also available at this number. Once an RMA number is obtained, the product should be returned directly to MaxBrite LED or the location designated at the time the RMA was issued. Product must be returned within 15 days of RMA issuance for the RMA to remain valid. Please mark all shipping boxes and packing slips with the RMA number. MaxBrite LED, at its sole discretion, may elect to provide replacement product prior to receipt of defective material. If such product is provided, user agrees to return to MaxBrite LED the defective product within 30 days of receipt of replacement. The Customer/Purchaser is responsible for all return shipping costs. Shipping costs are non-refundable. All returned merchandise must be sent back prepaid; we will not accept CODs. Please insure the package(s) for the full amount of the merchandise you are sending back to us. MaxBrite LED is not responsible for missing packages or missing items. Defective product is to be returned to the address listed as the return address on the shipping container. Failure to return defective product within specified time will result in user being charged for replacement product and will void all further warranty claims. Should circumstances arise that preclude the remedying of warranted defects by repair or replacement, MaxBrite LED shall, at its discretion and upon receipt and verification of defective product, refund to the buyer the purchase price or portion of purchase price theretofore paid to MaxBrite LED.

Limitation of Liability

High quality lighting products is the commitment of MaxBrite LED. By returning defective products it will help us monitor and further improve our product quality. Repair or replacement of product is the sole remedy available. UNDER NO CIRCUMSTANCE SHALL MAXBRITE LED BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL LOSS OR DAMAGE WHATSOEVER ARISING OUT OF, OR IN ANY WAY RELATED TO ANY DEFECT IN OR NON PERFORMANCE OF THE PRODUCTS. NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE OR IMPLIED. Furthermore, MaxBrite LED shall not be responsible for any other costs, including installation or field support labor or loss of profits, income or revenue. Additionally, any drawing, layout, quotation or other communication regarding suggested product type, amount or usage is for reference only and should be treated as an estimate. MaxBrite LED shall not be responsible for minimum illumination levels or other performance criteria. MaxBrite LED reserves the right to test and examine all products returned under this warranty to evaluate proper usage, determine the cause of failure, and make a determination, in its sole judgment whether the products are defective and covered by this warranty.