

# D Series



## 12 Volt Input Dc to Ac Inverter

## D12LM60J

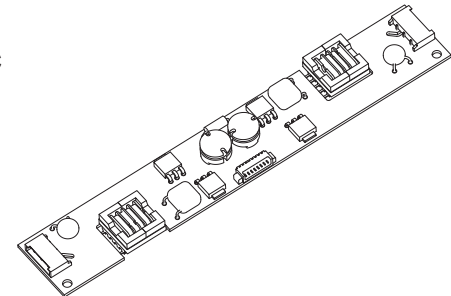
The D12LM60J is a generic dc to ac inverter designed to generate 6 mArms into a 500 - 700 Volt load (CCFL) from a nominal 12 Vdc source.

### FEATURES

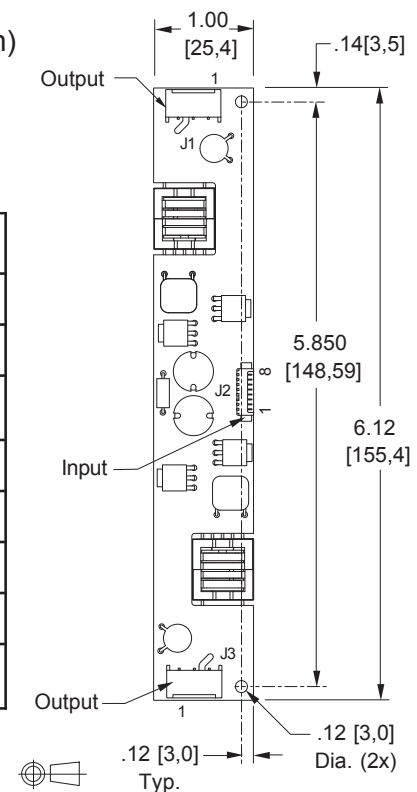
- Low Profile
- Display compatible connector
- High efficiency

### PHYSICAL SPECIFICATIONS

Size:	.79" x 3.58" x .32"
(without input connector)	(20,1mm x 90,9mm x 8mm)
Weight:	11.4 grams
Component Surface Temperature:	-20° to +80°C
Storage Temperature:	-20° to +85°C
Humidity:	95% RH Max



Characteristics	Value	Units	Note(s)
Input Voltage	10.8 - 12.6	Vdc	
Input Current	0.8 typ	Adc	$R_L = 100 \text{ kOhms}$
Minimum No Load Output Voltage	1500	Vrms	$V_{in} = 12.00 \text{ Vdc}$
Frequency	37 typ	kHz	$V_{in} = 12.00 \text{ Vdc}$
Output Current	6.0	mArms	$R_L = 100 \text{ kOhms}$
Efficiency	75	%	Typical
Enable Pin Input Current	25 typ	mAdc	$V_{in} = 12.00 \text{ Vdc}$
The maximum input current (which indicates an overload condition) is 1.0 Adc maximum.			



Input Connector: J2 Molex 53261-0871  
 Output Connector: J1,J3 JST SM02(8.0)B-BHS-1-TB

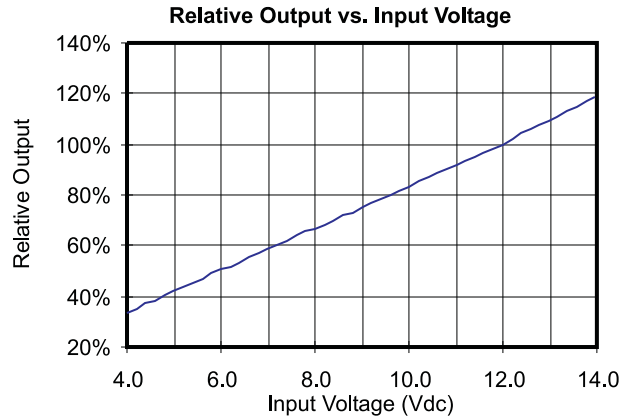
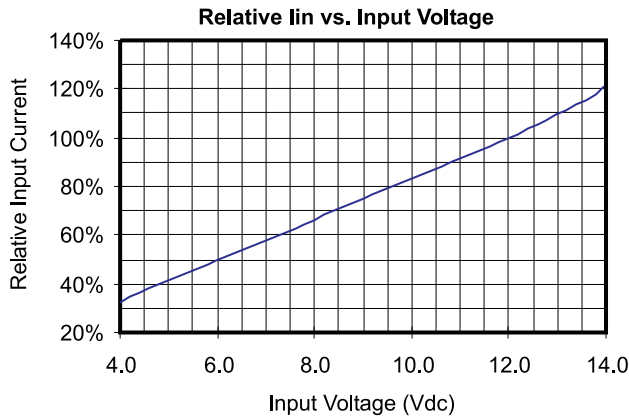
Inverters specifically designed to match most popular LCD modules are also available. Contact your authorized distributor or ERG direct.

**Endicott Research Group, Inc.**  
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### Pin Descriptions

J2-1 +Vin	J1-1 ACout
J2-2 +Vin	J1-2 ACreturn
J2-3 GND	
J2-4 GND	
J2-5 Enable	
J2-6 N/C	J3-1 ACout
J2-7 N/C	J3-2 ACreturn
J2-8 N/C	

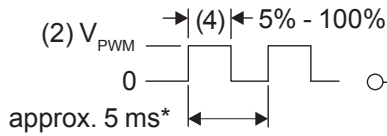
PCB components are shown for reference only. Actual product may differ from that shown.



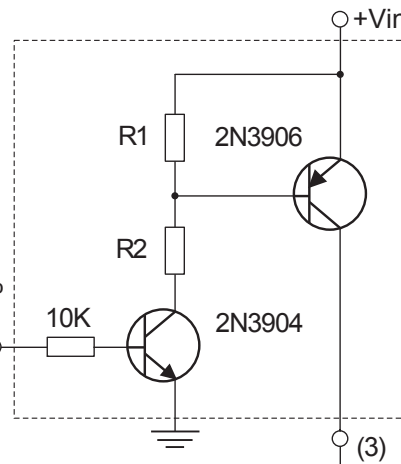
PWM Dimming

Required User Enable/Disable Interface Circuit

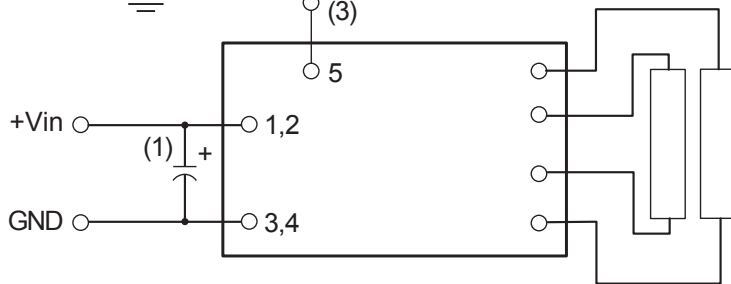
Circuit or equivalent required for proper inverter turnoff.



\* should be selected to be compatible with LCD and display driver



Vin	R1	R2
5V	3.3K	1.5K
8V	3.3K	1.8K
12V	3.3K	2.2K
24V	10.0K	8.2K



- (1) Low ESR type input by-pass capacitor (22 uF - 100 uF) may be required to reduce reflected ripple.
- (2)  $V_{P_{PWM}}$  from 2.4V to less than or equal to +Vin.
- (3) Full brightness without PWM control requires that pin 5 be tied to +Vin. Pin 5 must be at 0V to turn off.
- (4) Duty Cycle 5% - 100%.



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Specifications are subject to change without notice.

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