

D Series



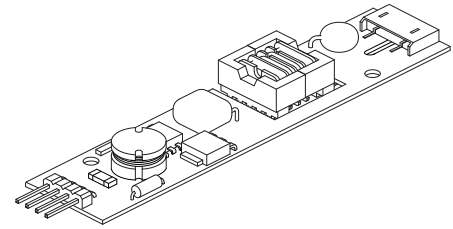
5 Volt Input Dc to Ac Inverter

D05M60J

The D05M60J is a generic dc to ac inverter designed to generate 6 mArms into a 350 - 550 Volt load (CCFL) from a nominal 5 Volt dc source.

FEATURES

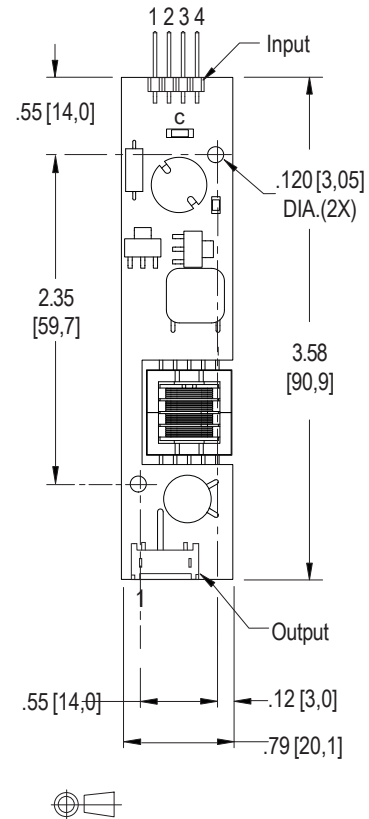
- Low Profile
- Display compatible connector
- High efficiency



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 | 4.50 - 5.25 | Vdc | |
| Input Current | 0.80 typ | Adc | $R_L = 75 \text{ kOhms}$ |
| Minimum No Load Output Voltage | 1200 | Vrms | $V_{in} = 5.00 \text{ Vdc}$ |
| Frequency | 43 typ | kHz | $V_{in} = 5.00 \text{ Vdc}$ |
| Output Current | 6.0 | mArms | $R_L = 75 \text{ kOhms}$ |
| Efficiency | 75 | % | Typical |
| Enable Pin Input Current | 23 typ | mAdc | $V_{in} = 5.00 \text{ Vdc}$ |
| The maximum input current (which indicates an overload condition) is 1.0 Adc maximum | | | |



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

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

Pin Descriptions

| <u>Input Connector</u> | <u>Output Connectors</u> |
|--|-----------------------------|
| 4 position right angle header (.025" square, .100" centers) | JST SM02(8.0)B-BHS-1-TB |
| J1-1 +Vin J1-2 GND J1-3 Enable * J1-4 N/C | J2-1 ACreturn J2-2 ACout |
| * Valid only with the "C" jumper removed | |

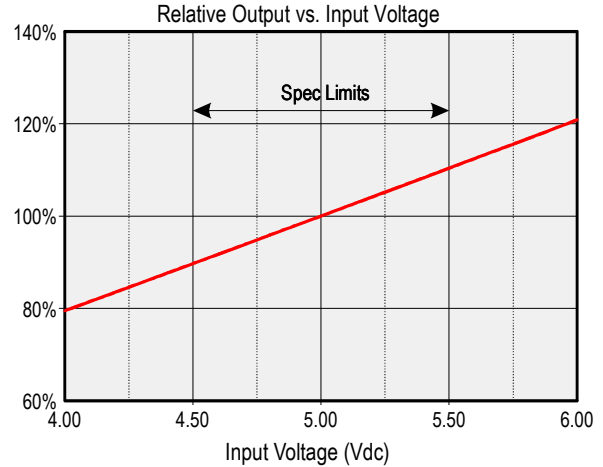
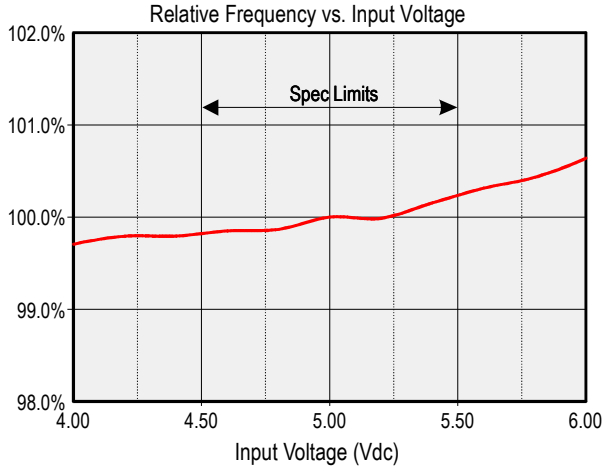
Endicott Research Group, Inc.

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Connection and Application Information

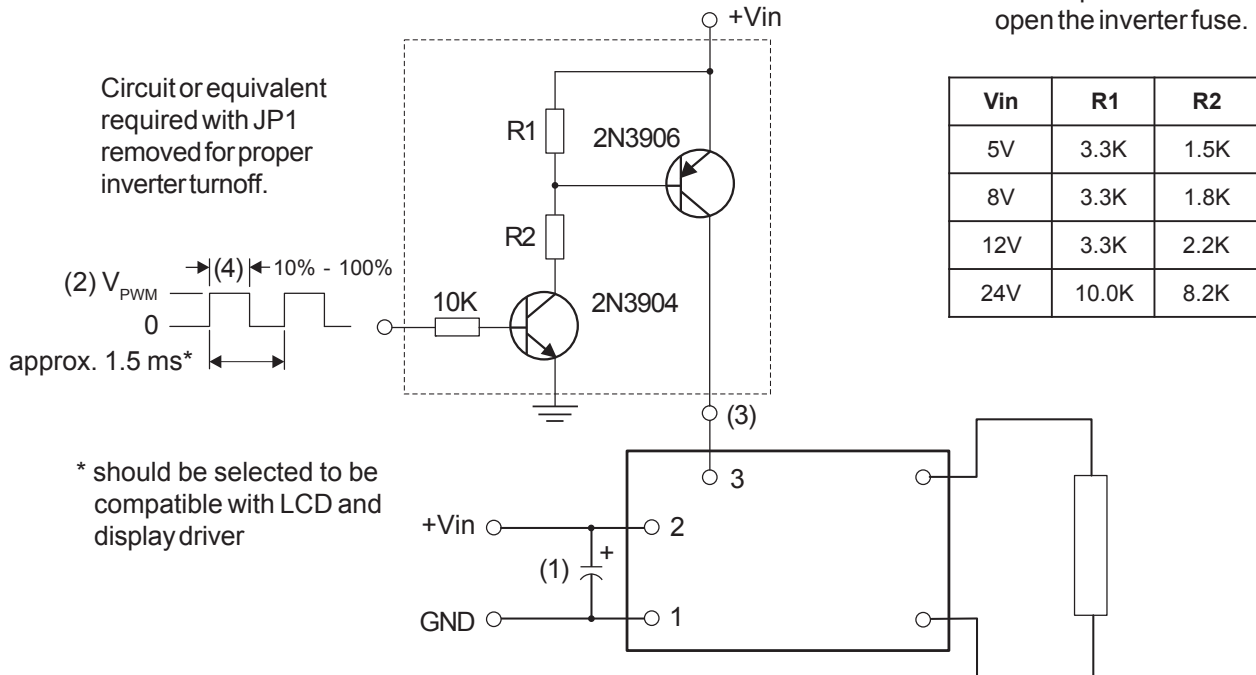
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PWM Dimming Required User Enable/Disable Interface Circuit (Valid only with JP1 removed)

With JP1 in place, a ground applied to the enable pin J1-3 will open the inverter fuse.



- (1) Low ESR type input by-pass capacitor (22 μ f - 100 μ f) may be required to reduce reflected ripple.
- (2) V_{PWM} from 2.4V to less than or equal to $+V_{in}$.
- (3) Full brightness without PWM control requires that pin 3 be tied to $+V_{in}$. Pin 3 must be at 0V to turn off.
- (4) Duty Cycle 10% - 100%.



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Specifications are subject to change without notice. 04/19/11

