Product Overview

The MicroTEG is a highly efficient, compact solution for powering a variety of loads from Thermoelectric Generator (TEG). MicroTEG line of products includes: standard, high, and ultra-high output suiting the needs of most low power applications to include: microprocessors, LEDs, fans, battery chargers, and much more. A simple switching circuit is employed to boost voltages as low as 800mV to 8V at output currents as high as 500mA. This driver is the ideal solution for a plethora of TEG designs.

The standard offering is a 0.45"L X 0.3"W X 0.26"H encapsuled MicroTEG. Custom sizes can be created to meet customers' requirements; please contact TEGpro for more information. The MicroTEG is supplied with 24 AWG 6" colored leads (red Vin+, black Vin-, orange Vout+, and green Vout-).

Features

- **Low Cost:** The MicroTEG is a compact, low cost solution for providing power to loads with voltage in excess of the input voltage.
- **Safety & Reliability:** The MicroTEG is encapsulated by an insulating epoxy and is resistant to harsh environments and moisture.
- **Small Size:** The MicroTEG is ideal for applications where size matters. Small size = more applications!

Typical Application

- Wireless Sensors
- Battery Chargers
- LEDs
- Waste heat harvesting
- Camp Lights
- Arduinos
- Fans
- Microprocessors
- And much more.
Specifications

- Input Voltage .................................................. $800\,mV_{DC}$
- Output Current, Standard ...................... $350\,mA$
- Output Current, High ............................... $400\,mA$
- Output Current, Ultra High ................... $500\,mA$
- Operating Temperature .................... $-40-+85^\circ{\text{C}}$
- Storage Temperature ...................... $-40-+125^\circ{\text{C}}$

Absolute Maximum Ratings

- Input Voltage ............................................... $3.0V_{DC}$
- Output Voltage ........................................... $8.0V_{DC}$
- Output Power .............................................. 1.5W

Typical Characteristics

- Efficiency ................................................... 80%
- Input Voltage Minimum ......................... $0.8V_{DC}$

Output Curves

![Output Curves Graph]

Specifications subject to change without notice. Nov, 2013 - Rev 1.0
**MicroTEG**
HVIxBC-x

**Dimensions**

Top view
- 30" (7.6mm)
- .45" (11.5mm)

Side view
- 26" (8.8mm)

**Part Numbers**

<table>
<thead>
<tr>
<th>Part Numbers</th>
<th>Description</th>
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<tbody>
<tr>
<td>HVI-M-350-L</td>
<td>MicroTEG Standard</td>
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<tr>
<td>HVI-M-400-L</td>
<td>MicroTEG High</td>
</tr>
<tr>
<td>HVI-M-500-L</td>
<td>MicroTEG Ultra High</td>
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