

## Specifications TEG Module TEG2-07025HT-SS

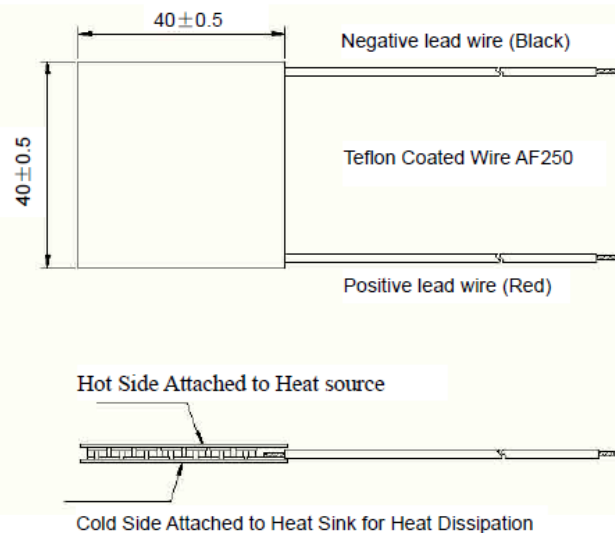
### OPERATING PARAMETERS:

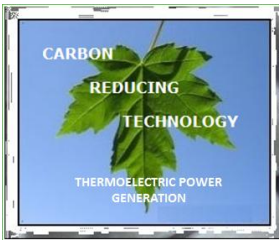
#### Description:

TEG2-07025HT-SS is a unique hybrid module. As long as a DT is applied to the module surfaces DC current will be generated. The module incorporates several unique engineered processes that allow it to withstand temperatures up to 190°C (374°F) hot side. The P and N elements incorporated in this module offer the greatest heat transfer capability in a 40 x 40 mm configuration, resulting in the highest potential power densities. The TEG2-07025HT-SS is ideally suited for liquid to liquid applications. It can be specified in both ceramic or Graphite covered. Graphite sheet offers exceptional thermal transfer ability, require no thermal grease and will not degrade over the life of the TEG module.



#### Geometric Characteristics Dimensions in millimeter





## **CONSTRUCTION SPECIFICATION:**

1. SnSb 240°C based solder hot and cold side.
2. Ceramic slit for multi thermal cycling applications both hot side and cold side ceramic.
3. Lapped for multiple modules on the same surface.
4. Teflon insulated on the lead wires.
5. Lead wire contacts are attached to cold side for extra protection.
6. Offered in Graphite cover (eliminates thermal grease requirements) or standard Ceramic

<b>Power ratings at various DT 's</b>			
<b>DT Celsius</b>	<b>Voltage Match</b>	<b>Current Match</b>	<b>Watts Maximum</b>
<b>50</b>	<b>.6</b>	<b>1.1</b>	<b>.66</b>
<b>80</b>	<b>1.0</b>	<b>2.0</b>	<b>2.00</b>
<b>100</b>	<b>1.3</b>	<b>2.2</b>	<b>2.86</b>
<b>120</b>	<b>1.4</b>	<b>2.4</b>	<b>3.36</b>
<b>150</b>	<b>1.8</b>	<b>3.0</b>	<b>5.40</b>
<b>170</b>	<b>1.9</b>	<b>3.2</b>	<b>6.08</b>
<b>180</b>	<b>2.0</b>	<b>3.4</b>	<b>6.80</b>

**EXAMPLE:** @100°C DT. Hot side 150°C- cold side 50°C

- The open circuit voltage = 2.6V
- The matched load output voltage = 1.3V
- Internal resistance = 0.5 Ohm.
- Matched load current is matched load output voltage/Internal resistance.
- Heat flux ~140 watt

*Outputs based on material in controlled Lab testing match load. Electrical resistance, system construction, and thermal resistance will influence outcome results.*