### Table: Thermoelectric Module Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Material Specifications (27 °C hot side temperature)</th>
<th>Material Specifications (50 °C hot side temperature)</th>
<th>Module material specifications are nominal values based on the hot-side temperature indicated. Thermoelectric material parameter tolerance is +/-10%.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vmax (V)</td>
<td>3.8</td>
<td>4.2</td>
<td>In no case should the module temperature be allowed to exceed its maximum operation/storage temperature.</td>
</tr>
<tr>
<td>Imax (A)</td>
<td>2.1</td>
<td>2.1</td>
<td>Please review all product and technical information, Thermoelectric Module Mounting Procedure, parameter definitions, FAQ’s, and ordering information posted on our website before purchasing or using this product.</td>
</tr>
<tr>
<td>Qmax (W)</td>
<td>4.8</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>DTmax (°C)</td>
<td>68</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Operation/storage temperature</td>
<td>-40 °C to +80 °C</td>
<td>-40 °C to +80 °C</td>
<td></td>
</tr>
</tbody>
</table>

### Diagram: Thermoelectric Module

- **Material**: Specifications
- **Operation/storage temperature**: -40 °C to +80 °C
- **Optional Features and Notes**:
  - Width, A (mm): 8 ±0.5/-0.2
  - Width, B (mm): 8 ±0.5/-0.2
  - Height, H (mm): 2.55 ±0.15
  - Flatness, F (mm): 0.15
  - Parallelism, P (mm): 0.15
  - Wire Size, WS (mm²): 0.12
  - Wire Length, WL (mm): 50
  - Performance graphs include thermal resistance of substrates.
  - Optional Features and Notes:
    - Add "P" to part number for sealing module with epoxy potting.
    - Module includes 30 μm nickel metallization on hot and cold sides.
    - The metallization does not include pre-tinning.
Unpotted TE-31-0.6-0.8 at a hot-side temperature of 30 °C
Potted TE-31-0.6-0.8 at a hot-side temperature of 30 °C
Unpotted TE-31-0.6-0.8 at a hot-side temperature of 50 °C
Potted TE-31-0.6-0.8 at a hot-side temperature of 50 °C
Unpotted TE-31-0.6-0.8 at a hot-side temperature of 70 °C
Potted TE-31-0.6-0.8 at a hot-side temperature of 70 °C