Thermoelectric module (TM) specification

<table>
<thead>
<tr>
<th>PO position #</th>
<th>TM</th>
<th>Internal Solder Melting Temp, °C</th>
<th>Max operating temperature, °C</th>
<th>Parameters in vacuum at hot side temperature 25 °C</th>
<th>Rac at 25 °C</th>
<th>Ceramic size, mm</th>
<th>TM Height</th>
<th>Wire</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>S-063-10-15-L2</td>
<td>138</td>
<td>130 115</td>
<td>3.0 8.0 14.9 74.5</td>
<td>2.03</td>
<td>30/30 15</td>
<td>3.80 0.02</td>
<td>24 100 5</td>
</tr>
</tbody>
</table>

Clamping force: 7.6 - 15.2 kg

![Diagram]

www.crystalltherm.com
Max $dT$ is reduced by 2-3K for silicon sealed and 1-2K for epoxy sealed versions.

![Graph showing $Q(dT)$ at $Thot=298K$](image)

- $0.1\times I_{max}$ (0.3 A)
- $0.25\times I_{max}$ (0.7 A)
- $0.5\times I_{max}$ (1.5 A)
- $0.75\times I_{max}$ (2.2 A)
- $1\times I_{max}$ (3 A)
U(dT) at Thot=298K

- 0.1*Imax (0.3 A)
- 0.25*Imax (0.7 A)
- 0.5*Imax (1.5 A)
- 0.75*Imax (2.2 A)
- 1*Imax (3 A)
The graph shows the COP (Coefficient of Performance) as a function of dT (temperature difference), with different curves representing various current levels as a fraction of the maximum current (Imax).

- **0.1*Imax (0.3 A)**: The curve is the steepest, indicating the highest COP at lower current levels.
- **0.25*Imax (0.7 A)**: This curve is less steep than the 0.1*Imax curve but still shows a significant COP.
- **0.5*Imax (1.5 A)**: The COP decreases further as the current increases, showing a moderate rate of decrease.
- **0.75*Imax (2.2 A)**: The COP continues to decrease but at a slower rate than the previous curves.
- **1*Imax (3 A)**: The curve is the flattest, indicating the lowest COP at the highest current level.

The graph is labeled as COP(dT), with the axes indicating COP on the y-axis and dT on the x-axis.