

# uTE Thermal-Electric Modules

- ▶ Heat and cool microfluidic applications
- ▶ Use with uTS temperature sensors and uProcess software for closed-loop thermal control

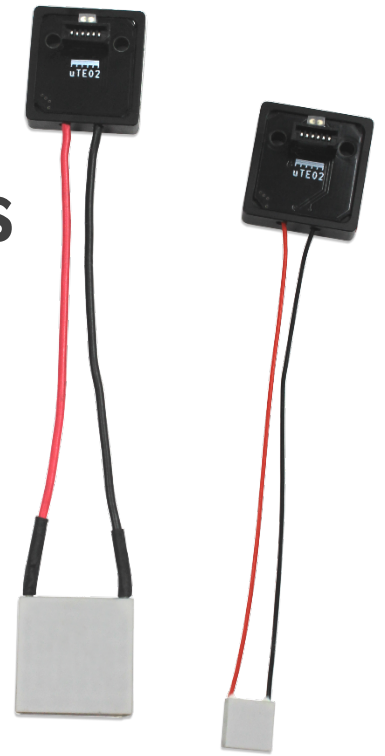
## Specifications

uTE Module Part Number uTE02-[PELTIER]

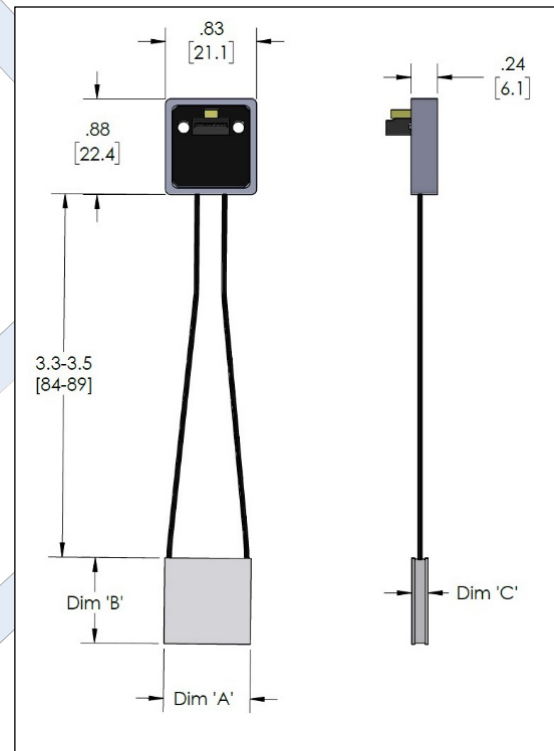
<b>Maximum Temperature/<math>\Delta T</math></b>	130° C / 67° C (266° F / 152.6° F)
<b>Heating/Cooling Element Type</b>	Single-stage Peltier
<b>Mounting Holes</b>	2 x 2.8 mm (0.11") through-holes for mounting to uProcess breadboard via 2-28-3/8" screws
<b>4PM01 Power Manifold</b>	Required. For connecting up to 4 uTE or other power modules; includes 4 flat flex connector cables.
<b>EIB200 Automation Interface</b>	Required for control of 4PM01 power manifold via uProcess™ software; includes software, LabVIEW™ drivers, and SDK
<b>uTE Heat Sink</b>	Optional. Anodized aluminum, adhesive back. 8.9 x 8.9 mm (0.35 x 0.35") p/n HS-0808 or 20 x 20 mm (0.79 x 0.79") p/n HS-2020
<b>Breadboard</b>	Optional for mounting uProcess devices. p/n uPB-05, uPB-08, uPB-12, or iBB.

**Peltier Options [PELTIER]**

	Size (A x B x C)	Qmax	Vmax	I <sub>max</sub>
<b>040808</b>	0.34 x 0.34 x 0.09" (8.3 x 8.3 x 2.3 mm)	4.3 W	3.9 V	2.0 A
<b>132020</b>	0.79 x 0.79 x 0.16" (20 x 20 x 4.0 mm)	13 W	3.7 V	6 A
<b>151530</b>	0.59 x 1.18 x 0.15" (15 x 30 x 3.7 mm)	15 W	4.2 V	6 A



## Dimensions



3D model available upon request