Part # **CMO-32-62S CASCADE**

Thermoelectric TEG power module consists of the following parts:
Constructed of a hot side OXIDE module with a Bi_2Te_3 cold side module.

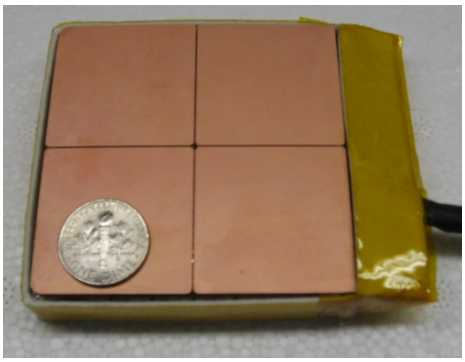
Configuration & Assembly

When the hot side surface is interfaced with a heat source, and the opposite side surface is interfaced with a cold side heat removal system the module will produce DC power.

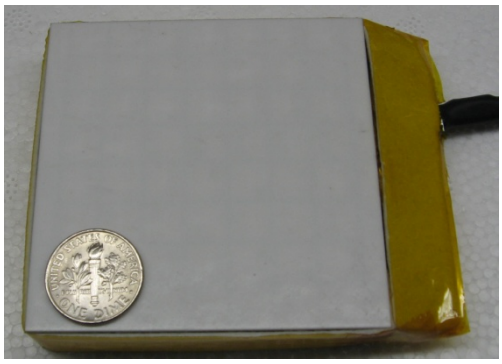
- Hot side is mounted with a Alumina plate
- Cold side is Cu (Copper) plating and GEL PAD for electrical Isolation

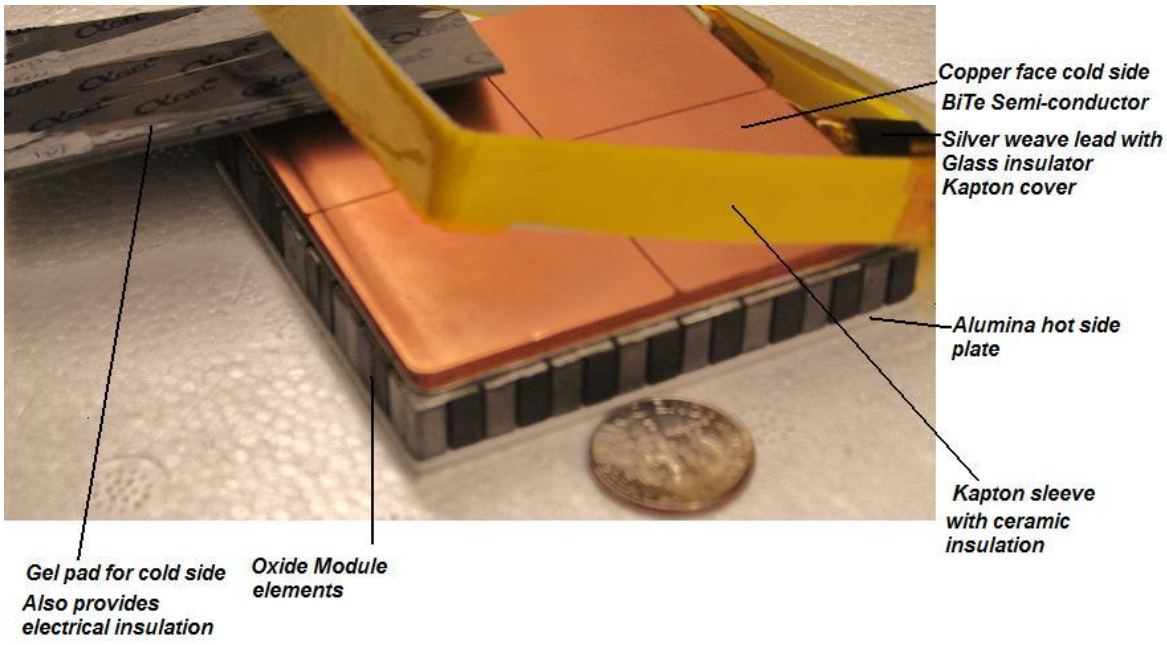
Exposing the cold side to extreme temperatures will result in failure of the module.

Cold side face Cu (Copper)



Hot side (AlO_3) Alumina face





Instructions for use:

The upper limit of the high temperature side is 600°C
The upper limit of the cold side interface is 200°C
Do not lift by the lead wires.
Lead wires MUST BE ATTACHED TO THE COLD SIDE WITH KAPTON TAPE to protect extension wire

Torque requirements: **5 N.m is approximately 45 in/lbs (inch pounds) or 3 ft/lb (foot pounds). VERY LITTLE TORQUE! 4 x SUS304 M6 screws.**

Thermal Conductivity:

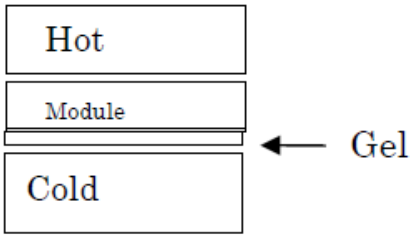
Material

Oxide Material 2~4W/mK
BiTe Material 1.4~1.9W/mK

Module (System)

	Cascade
°C	W/mK
100	0.638
200	0.644
400	0.656
500	0.665
700	0.775

Please place the gel sheet on the cold side.



Please place the gel sheet on the cold side

High temperature heat collection fin

Hot side temperature	Material
~450 C	Aluminum ,
~700 C	Iron (HiSiFCD)

*** Internal Resistance 3.5Ω (Ambient temperature)**

Heat Source°C	500	500
Hot Side°C	432	480
Cold Side°C	40	45
Open Voltage(V_o)	18.7	19.49
Max Voltage(V_m)	9.34	9.75
Current (A)	1.04	1.13
Ω	8.95	8.62
Max Output (W)	9.74	11.01

All outputs are based on the DT and Hot side and cold side temperatures.
As these inputs vary so will power produced.

Limited Warranty: Tecteg Mfr. warrants that its product will be free from defects in material and workmanship for 1 year from ship date. We will not be responsible for lead wire damage or improper installation.