

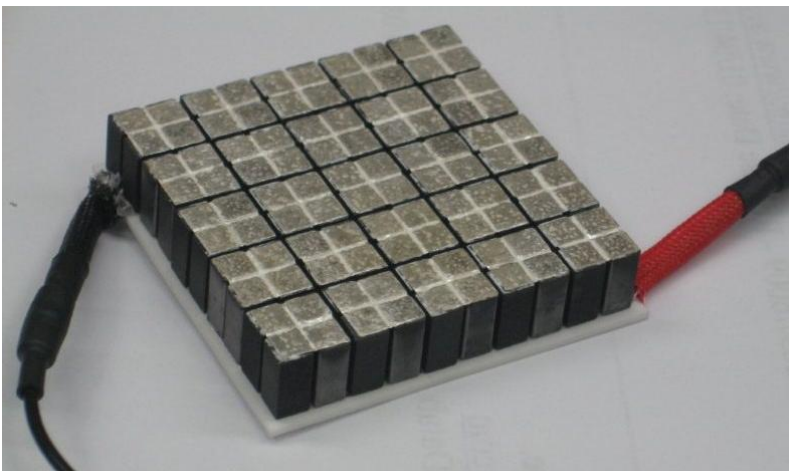
Part# CMO-25-42S

### Installation Instructions:

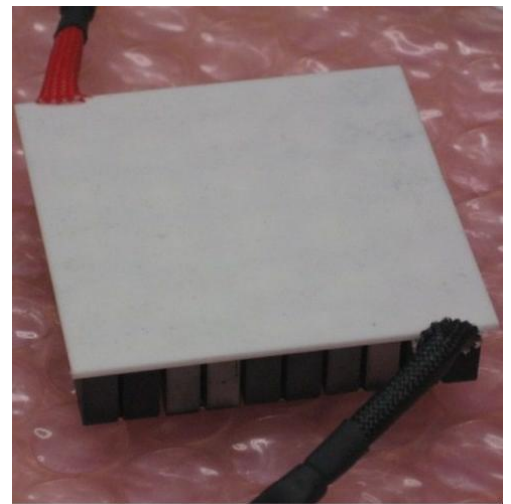
Kapton tape should be used to hold down leads to the cold side surface. The leads are Silver (Ag), upper limit temperature is 900°C with 10 cm covered by glass sleeve. The extended wires are Teflon insulated rated for 250°C so they need to be protected from the hot side surface as well. The Gel pad goes on the cold side between cold plate and the module. Gel pads thermal conductivity is 8 W/(mk) and also acts as an electrical insulator.

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.



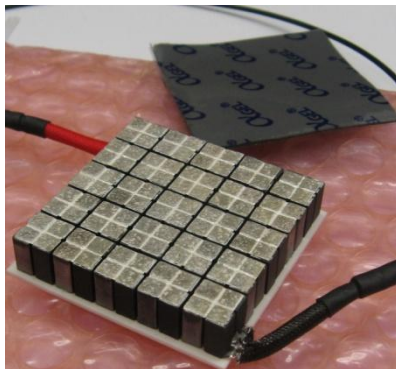
Part# CMO-25-42S Cold side view with 25 couples. Size 42 mm x 42 mm Silver(Ag) leads with glass fiber insulation. Design for temperatures up to 800°C

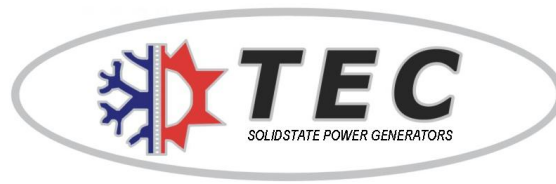


Part# CMO-25-42S Hot side

### Configuration and Usage:

The modules consist of Oxide Thermoelectric Material with an attached alumina plate for excellent thermal contact to the hot side surface. A Gel pad is provided and is used to electrically insulate the cold side (shown below). The cold side is designed into quadrants to help eliminate the thermal stress put on the module once in operation.





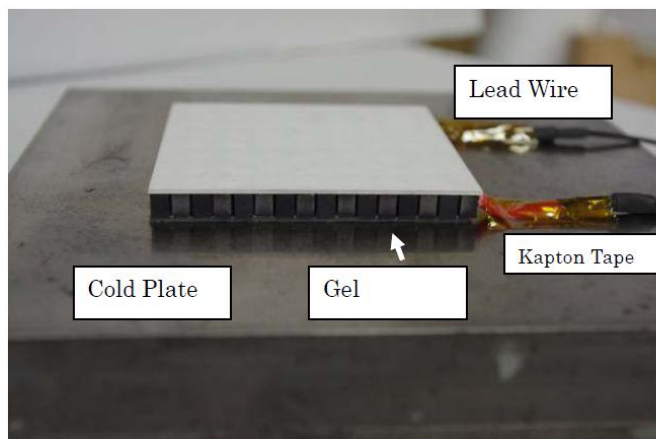
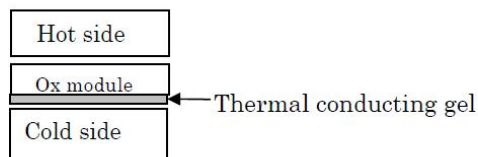
## Hazards:

- Non- condensing
- Do not left module using lead wires.
- Lead wire **MUST BE SEPARATED FROM HOT SIDE.**
- Never pick up modules from the leads. The leads are made of Silver conductor weave and are very fragile to tension stress (Pulling).

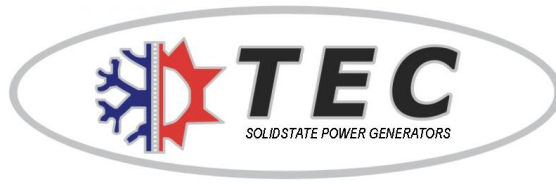
Thermal Conductivity:    2 ~4 W/mK

## Installation:

- Use Kapton tape to attach lead wires to cold side. This will protect wires from intense hot side heat as illustrated in figure below.



Torque to press the module:    about 5 N·m



Specification:

CMO-25-42S New 2014

	300	400	500	600	700	800
Cold side Tc		50	50	50	50	50
$\Delta T$		350	450	550	650	750
$\Omega$		2.26	2.40	2.47	2.55	2.62
OV		3.98	5.31	6.50	8.02	10.0
V		1.99	2.65	3.25	4.01	5.0
A		.69	.86	1.03	1.23	1.50
W		1.37	2.28	3.35	4.93	7.50

## High temperature heat collection fin

Hot side temperature

~450 C

~700 C

~800 C

~1000 C

Material

Aluminum ,

Iron (HiSiFCD)

Iron(SCH24 + Nb)

Stainless steel (S30400 , S43000)

Hastelloy (for HCL,SOx in gas )

Temperature depends on customer site

Material should decide with customer

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.