

DAFTAR PUSTAKA

- A. A. Rokhim, L. E. (2023). Pemanfaatan Energi panas menggunakan Termoelektrik Generator dengan Variasi Peltier.
- Bizzy, I. (2022). *Buku Ajar Modul Termoelektrik*. Palembang: Noer Fikri Offset.
- Enescu, D. (2019). *Green Energy Advances*. Romania: Valahia University of Targoviste.
- Lasance, C. J. (2005). Electronic Cooling. *Advances In High-Performance Cooling For Electronics*.
- Mani, P. I. (2016). *Design, Modeling and Simulation of Thermoelectric Cooling System (TEC)*. Kalamazoo: Western Michigan University.
- Nofri, M. (2020). Analisis Perubahan Sifat Mekanik AL 6063 Setelah Dilakukan Heat Treatment Pada Temperatur Tetap Dengan Waktu Tahan Yang Bervariasi. 2.
- Rahman, A. (2013). Classification of copper and copper alloys.
- Rahmawati, Z. S. (2010). Analisis Pengaruh Sr dan Ti Terhadap Ketahanan Korosi Paduan AC4B .
- Santoso, A. (2013). Studi Akumulasi Logam Tembaga (Cu) dan Efeknya terhadap Struktur Akar Mangrove.
- Sigalingging, F. A. (2022). Analisis Pembangkit Listrik Termoelektrik Generator Diradiasi oleh Panas Matahari. 21.
- Siregar, A. R. (2022). Analisis Pengaruh Karakteristik Termoelektrik Generator Sebagai Peubah.
- Zhu, X. (2019). Construction and Building Materials. *A review on thermoelectric energy harvesting from asphalt pavement: Configuration, performance and future*.

LAMPIRAN

Lampiran 1 Proses Merangkai TEG dengan Heatsink Alumunium dan Tembaga



Lampiran 2 Proses Pengukuran Gas sebelum eksperimen



Lampiran 3 Proses Pengukuran Gas setelah eksperimen



Lampiran 4 Proses Pengukuran Temperatur dingin pada Heatsink Alumunium dan Tembaga



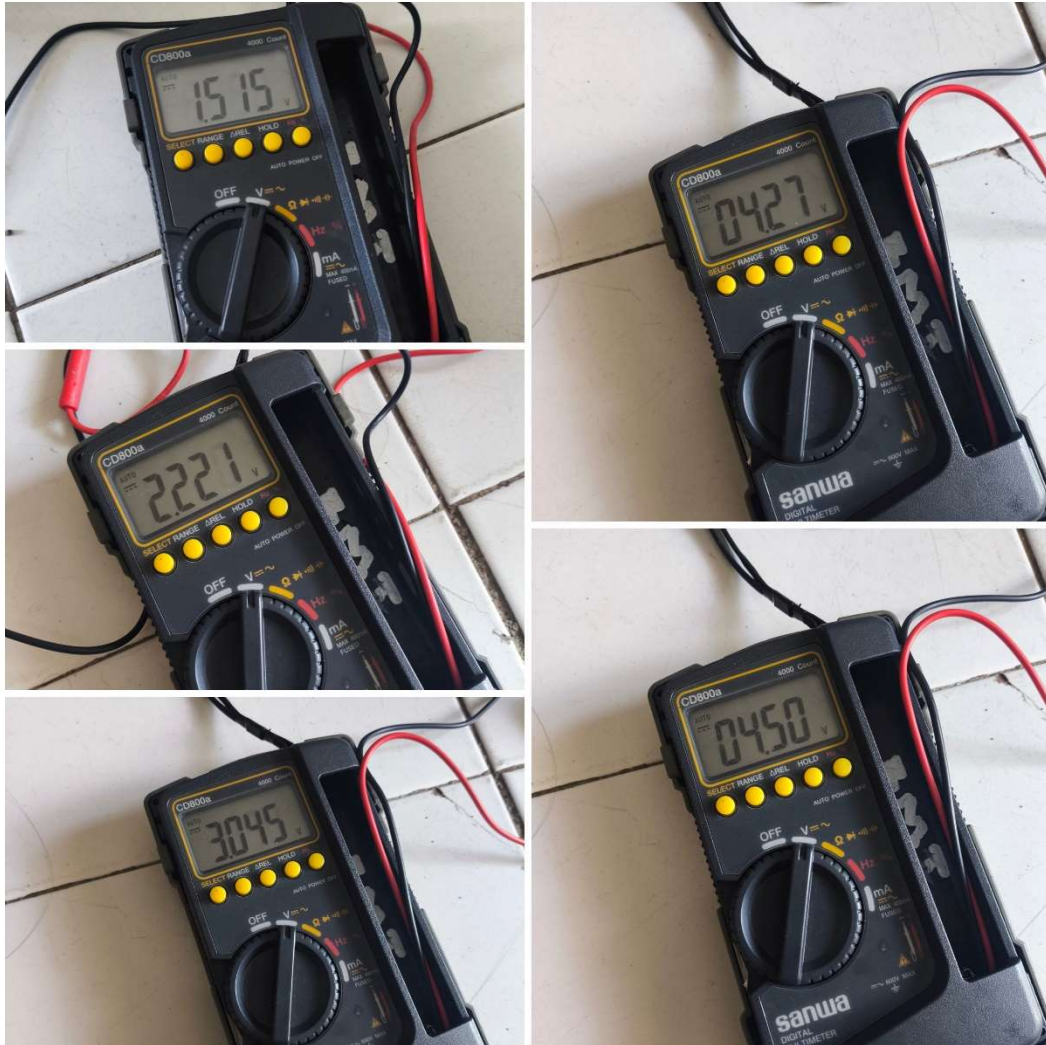
Lampiran 5 Proses Pengukuran Temperatur panas pada Heatsink Alumunium dan Tembaga



Lampiran 6 Proses Pengukuran Tegangan yang dihasilkan TEG dengan Heatsink Aluminium



Lampiran 7 Proses Pengukuran Tegangan yang dihasilkan TEG dengan Heatsink Tembaga



Lampiran 8 Spesifikasi TEG SP1848 (1)



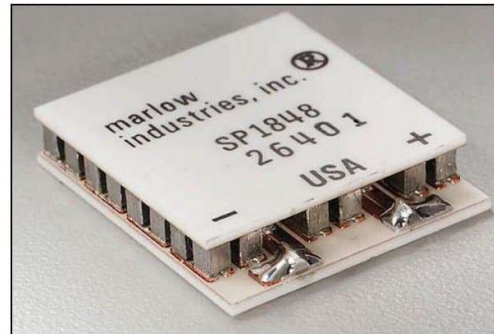
marlow industries inc.®

Thermoelectric Cooler

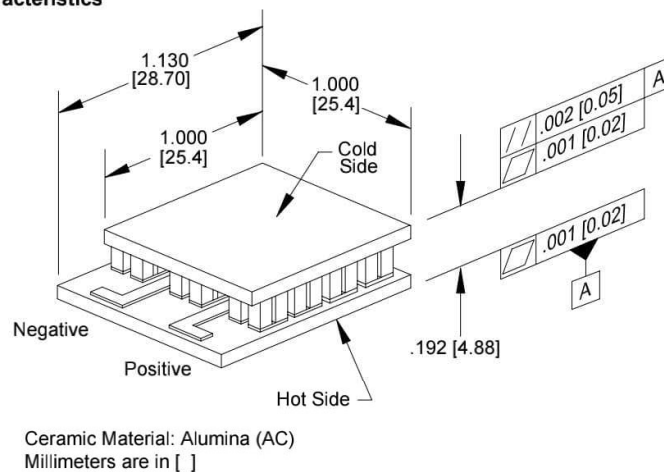
SP1848

Performance Values

Hot Side Temperature (°C)	27°C	50°C
ΔT_{max} (°C-dry N ₂):	62.0	70.6
Q _{max} (watts):	21.3	23.6
I _{max} (amps):	9.36	9.24
V _{max} (vdc):	3.48	3.88
AC Resistance (ohms):	0.323	---



Mechanical Characteristics



Ordering Options

SP1848-00	with out lead wire
SP1848-03	with 4" lead wire

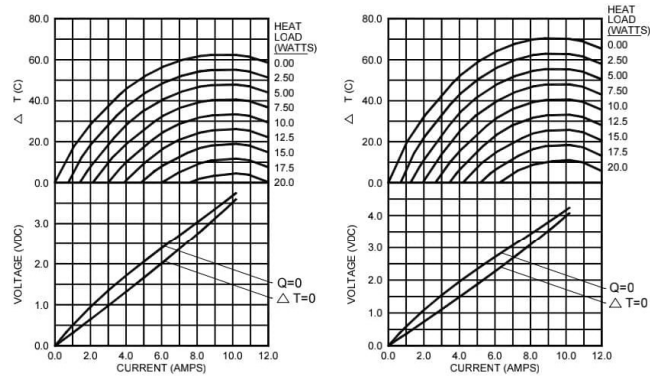
Lampiran 9 Spesifikasi TEG SP1848 (2)

Thermoelectric Cooler

SP1848

Performance Curves

Environment: One atmosphere dry nitrogen
 Hot Side Temperature: 27°C Hot Side Temperature: 50°C



For performance information in a vacuum or with hot side temperatures other than 27°C or 50°C, consult one of our Applications Engineers.

Installation

Recommended mounting methods: Bonding with thermal epoxy or soldering with metallized ceramics. For additional information, please refer to our TEC Installation Guide.

Operation Cautions

For maximum reliability, storage and operation below 85°C in a non-condensing environment is recommended. To minimize thermal stress, use linear/proportional temperature control or a similar method rather than an ON/OFF method.



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