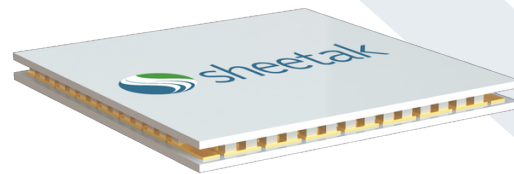


CENTUM[®] C3-238-238-07

2-Stage Thermoelectric Cooler Chip



With the most couples of any of our standard offerings, this high-capacity thermoelectric cooler provides up to 34 watts of cooling with a 97°C ΔT_{max} in a 40×40×3.7 mm format, making it a strong fit for defense electronics, imaging platforms, and high-power instrumentation.

Features

- 34 W maximum cooling
- 40×40 mm size
- Zero vibration
- High thermal load
- Rugged design

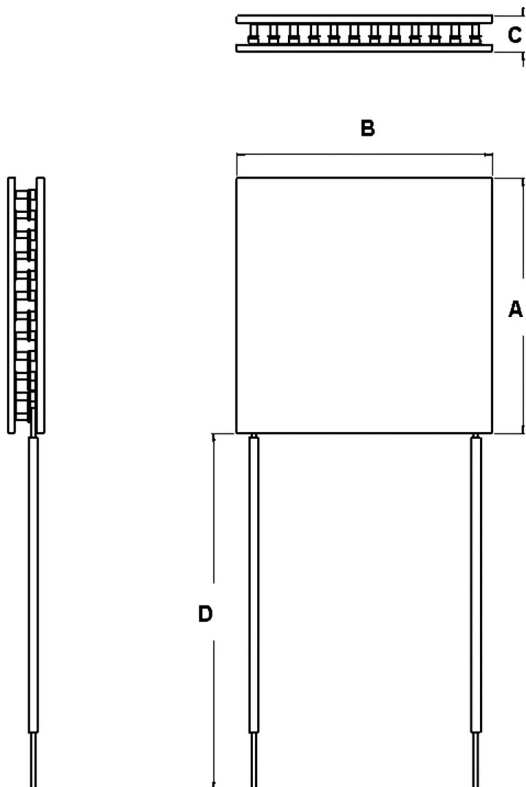
Applications

- Thermal imaging
- Defense electronics
- Scientific equipment
- Large sensors
- Fan/liquid replacement

Performance Specification Sheet

Hot Side Temperature T_h (°C)	27	50
ΔT_{max} (°C)	98.1	110.1
Q_{max} (Watts)	38.2	44.1
I_{max} (Amps)	7.0	7.4
V_{max} (DC Volts)	21.4	23.0
R_{AC} (Ω)	2.43	
Mass (Grams)	17	

Dimensions

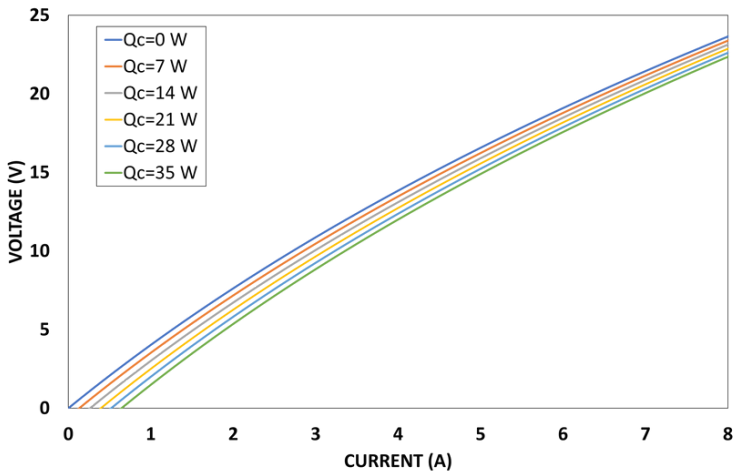


Model #	A
A	40 +/- 0.1 mm
B	40 +/- 0.1 mm
C	3.7 +/- 0.2 mm
D	50 mm

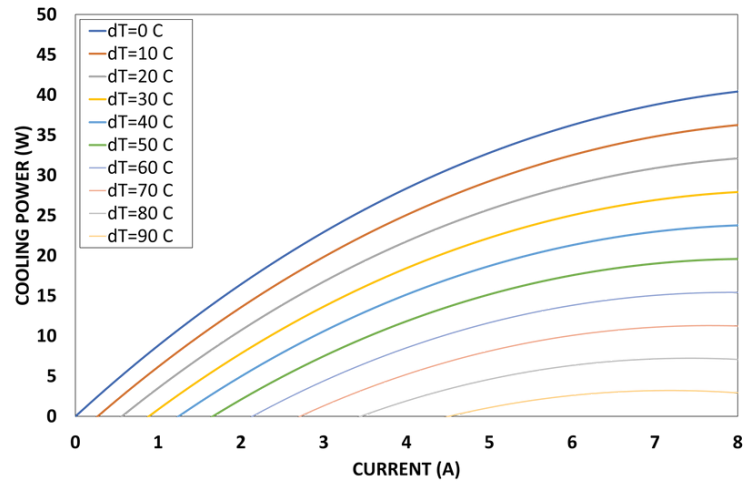
Standard lapping is +/- 0.025 mm

► Performance curves at $T_{hot} = 27^{\circ}\text{C}$

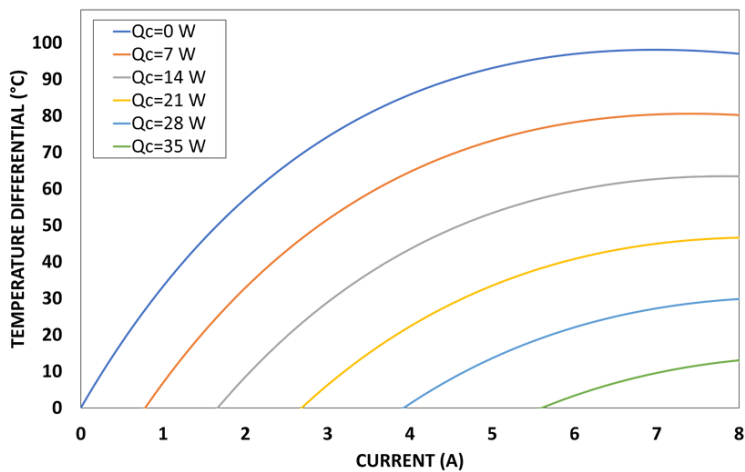
Current vs. Voltage



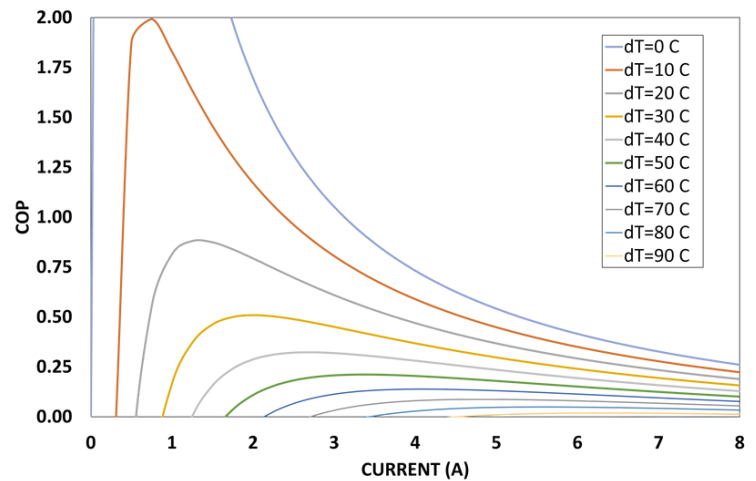
Current vs. Cooling Power



Current vs. Temperature Differential

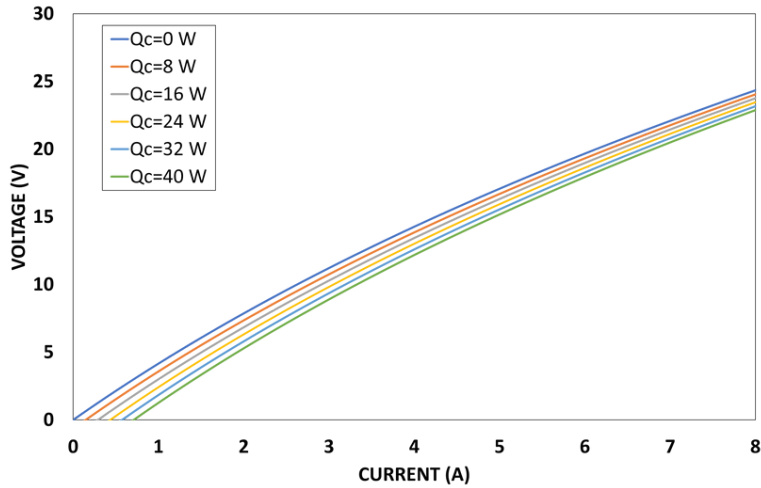


Current vs. COP

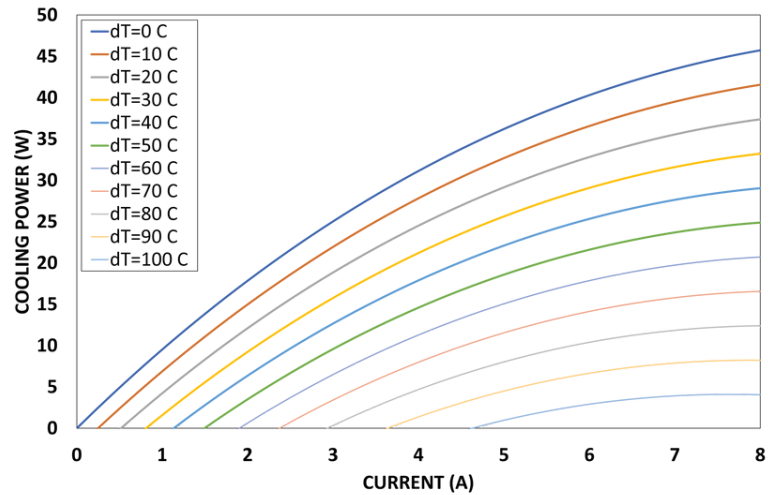


► Performance curves at $T_{hot} = 50^{\circ}\text{C}$

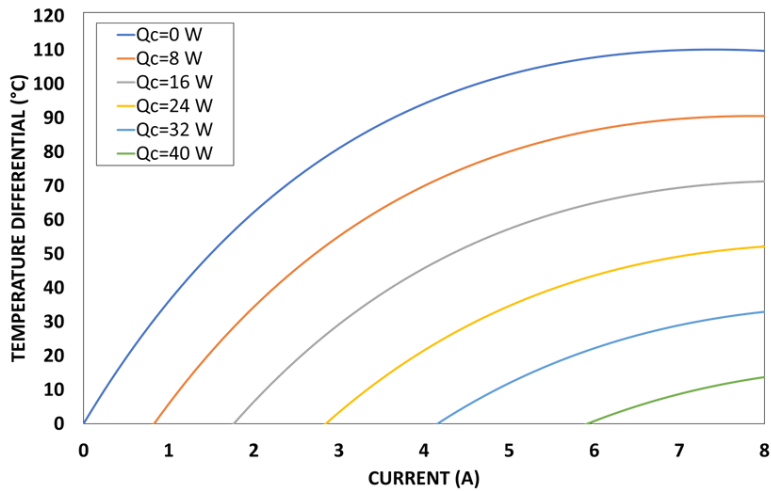
Current vs. Voltage



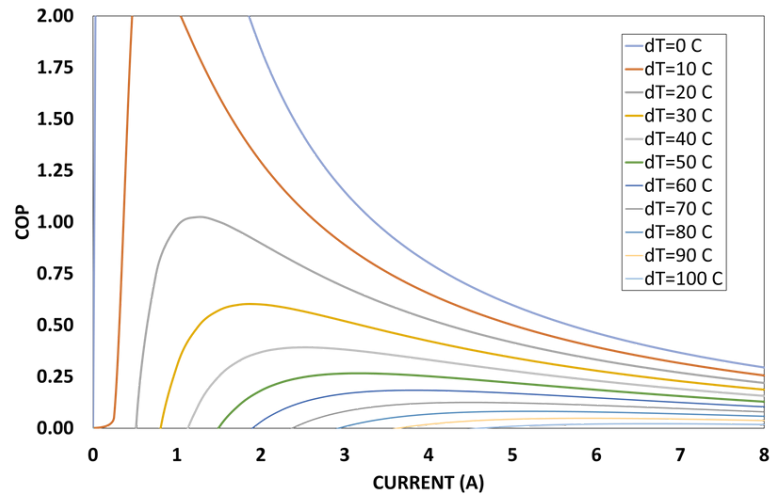
Current vs. Cooling Power



Current vs. Temperature Differential



Current vs. COP



➤ Other Standard Models

Model Number	Dimensions (mm)	T _h (°C)	ΔT _{max} (°C)	Q _{max} (Watts)	I _{max} (Amps)	V _{max} (DC Volts)	R _{AC} (Ω)	Mass (Grams)
C3-21-21-07	10x12.8x2.8	27	98.1	3.4	7.0	1.89	0.21	2.5
C3-38-38-07	13x16x2.8	27	98.1	6.1	7.0	3.4	0.39	3
C3-71-71-07	22x22x2.8	27	98.1	11.4	7.0	6.4	0.72	5
C3-127-127-07	29x29x3.3	27	98.1	18	7.0	11.4	1.3	8

Model Number	Dimensions (mm)	T _h (°C)	ΔT _{max} (°C)	Q _{max} (Watts)	I _{max} (Amps)	V _{max} (DC Volts)	Mass (Grams)
C3-21-21-07	10x12.8x2.8	50	110.1	3.9	7.4	2.0	2.5
C3-38-38-07	13x16x2.8	50	110.1	7.0	7.4	3.7	3
C3-71-71-07	22x22x2.8	50	110.1	13.2	7.4	6.9	5
C3-127-127-07	29x29x3.3	50	110.1	23.5	7.4	12.3	8

➤ *About Sheetak*

Sheetak is redefining what's possible in thermal management and energy harvesting through advanced thermoelectric technology. With a portfolio of more than 25 issued patents, we design and manufacture high-performance thermoelectric chips that serve a diverse range of applications, from optoelectronics, data centers, and AI hyperscalers to telecom infrastructure, aerospace, and IoT systems.

Headquartered in Austin, Texas, Sheetak brings together deep expertise in material science, device engineering, and scalable manufacturing. By pushing the limits of thermoelectric performance, we help our customers meet today's toughest thermal challenges and enable the systems that power tomorrow.

➤ *Contact Us*



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