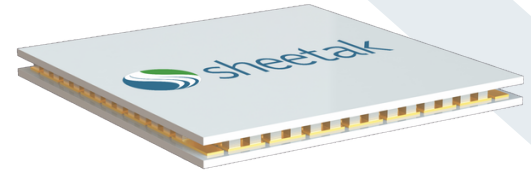


CENTUM[®] C3-127-127-07

2-Stage Thermoelectric Cooler Chip



The C3-127-127-7 is a multi-stage thermoelectric device that delivers up to 18 watts of cooling and a 97 °C maximum temperature differential in a 29×29×3.3 mm size, offering reliable performance in medical equipment, industrial systems, optical devices, and more.

Features

- 18 W maximum cooling capacity
- 29×29 mm size
- Patented multi-stage design
- Reduced EMI
- Load cycling

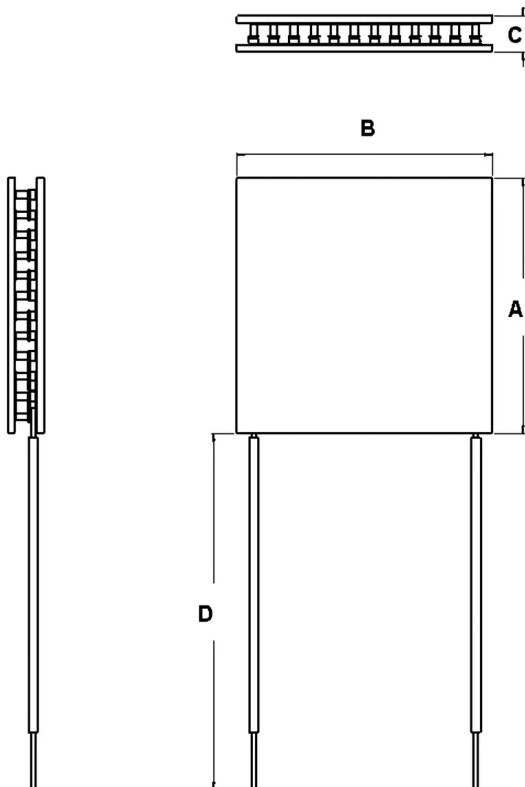
Applications

- Medical imaging
- Aerospace payloads
- Industrial testing
- High-power photonics
- Embedded electronics

Performance Specification Sheet

Hot Side Temperature T_h (°C)	27	50
$\Delta T_{\max}$ (°C)	98.1	110.1
$Q_{\max}$ (Watts)	20.4	23.5
$I_{\max}$ (Amps)	7.0	7.4
$V_{\max}$ (DC Volts)	11.4	12.3
R_{AC} (Ω)	1.3	
Mass (Grams)	8	

Dimensions

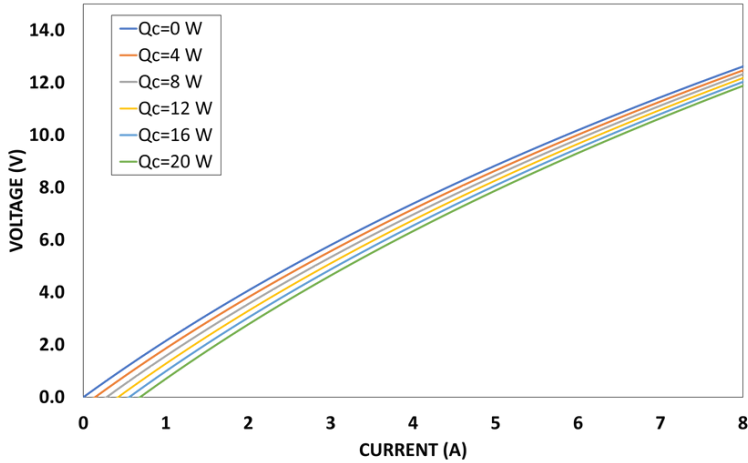


Model #	A
A	29 +/- 0.1 mm
B	29 +/- 0.1 mm
C	3.3 +/- 0.2 mm
D	50 mm

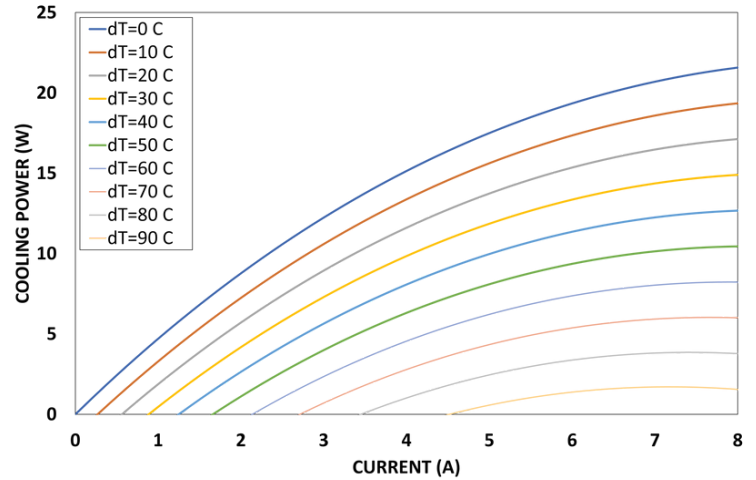
Standard lapping is +/- 0.025 mm

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

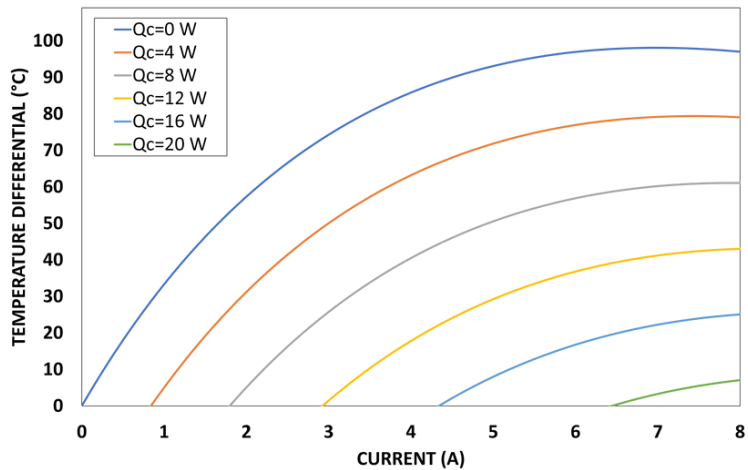
Current vs. Voltage



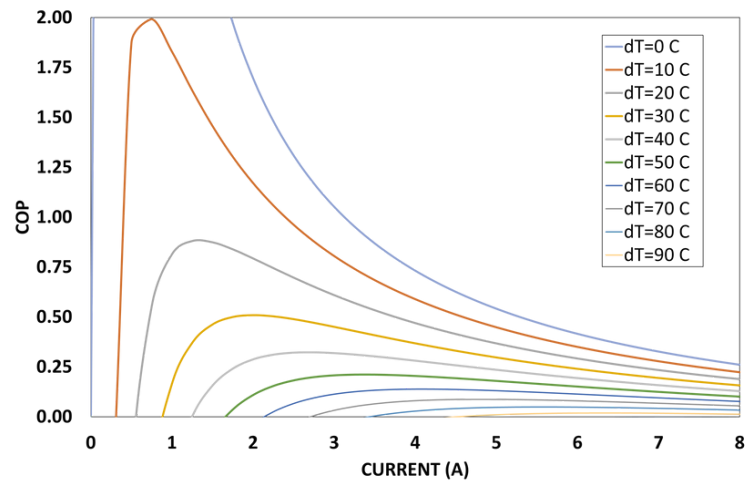
Current vs. Cooling Power



Current vs. Temperature Differential

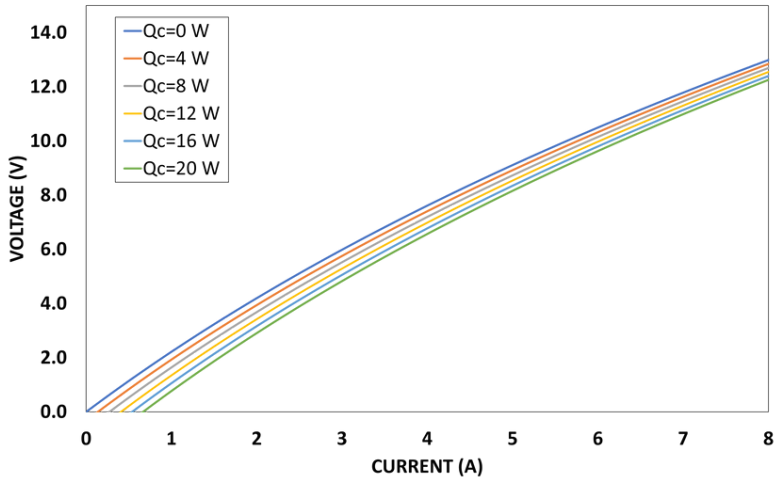


Current vs. COP

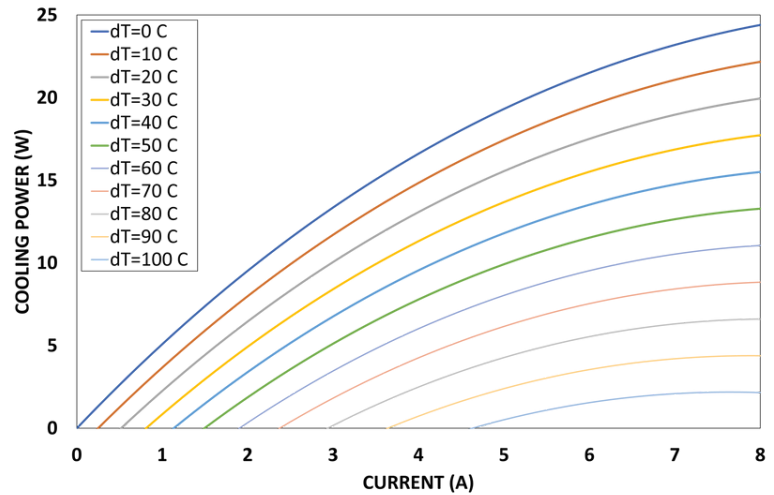


► Performance curves at $T_{hot} = 50^{\circ}\text{C}$

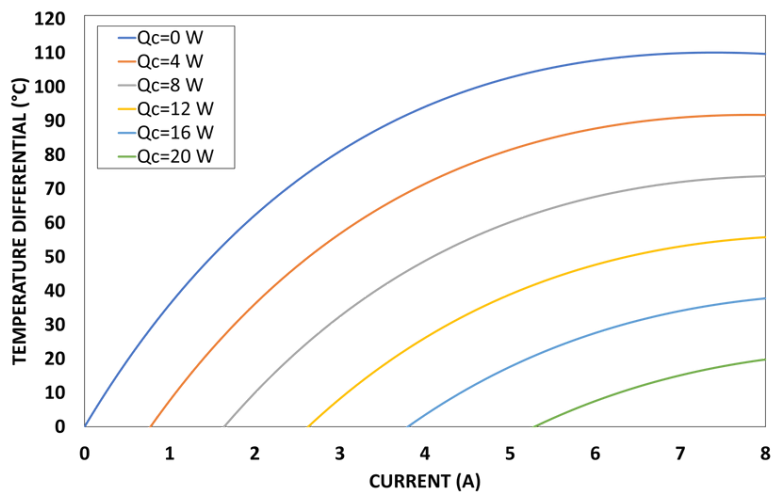
Current vs. Voltage



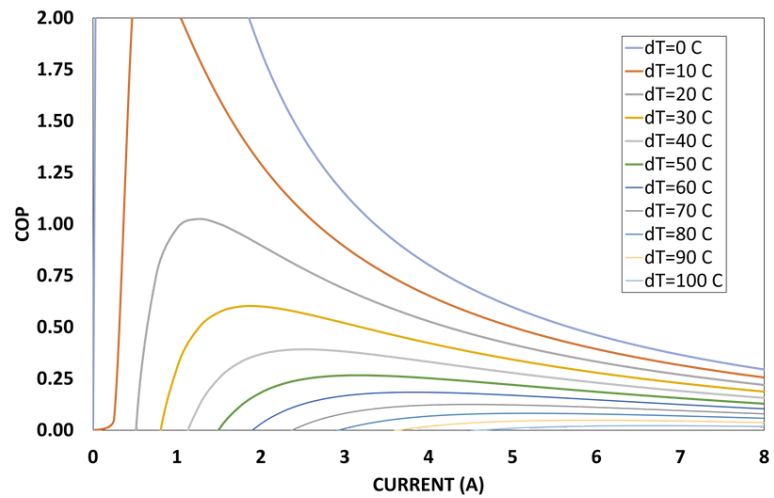
Current vs. Cooling Power



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
C3-238-238-07	40x40x3.7	27	98.1	38.2	7.0	21.4	2.43	17

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
C3-238-238-07	40x40x3.7	50	110.1	44.1	7.4	23.0	17

➤ *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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