sheetak
Advanced Thermoelectrics

CENTUM® SKCM-240-11

2-Stage Thermoelectric Cooler Chip

The CENTUM® SKCM-240-11 is a high-power, two-stage thermoelectric cooler delivering up to 90W of cooling in a 40×40 mm footprint. Ideal for optical sensors, medical devices, and aerospace systems, it offers reliable solid-state performance with a 95 °C max ΔT and a −40 to 100 °C operating range.

Features

- 90 W maximum cooling
- 40×40 mm size
- Wide operating range
- Large ΔT capability
- RoHS compliant construction

Applications

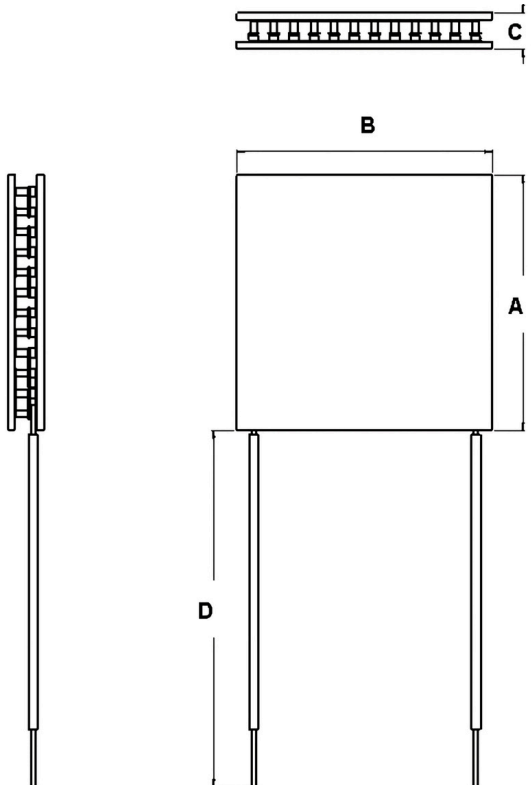
- Infrared/optical sensors
- Medical diagnostic equipment
- Aerospace electronics
- Laser systems
- Industrial automation

Performance Specification Sheet

Hot Side Temperature T_h (°C)	27	50
ΔT_{max} (°C)	82	95
Q_{max} (Watts)	73	90
I_{max} (Amps)	9.5	10.3
V_{max} (DC Volts)	18	21.7
R_{AC} (Ω)	1.80	2.00

All performance values fall within ±10% tolerance of tested data and/or models.

Dimensions



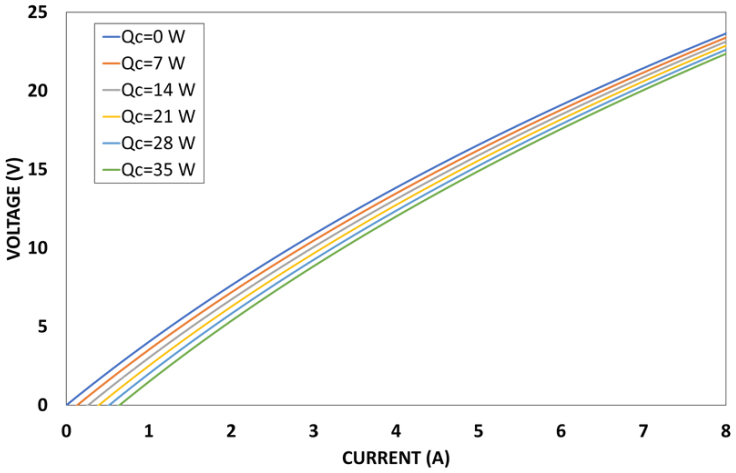
Model #	A
A	40 +/- 0.1 mm
B	40 +/- 0.1 mm
C	3.2 +/- 0.2 mm
D	150 mm

Standard lapping is +/- 0.025 mm

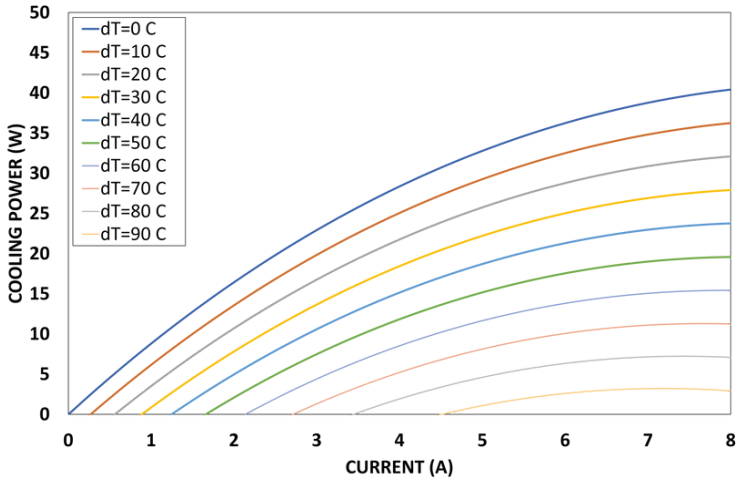
sheetak
Advanced Thermoelectrics

Performance curves at T_{hot} = 27°C

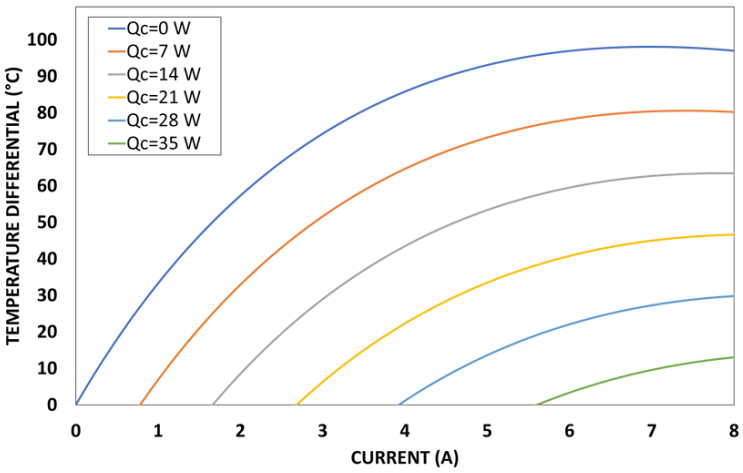
Current vs. Voltage



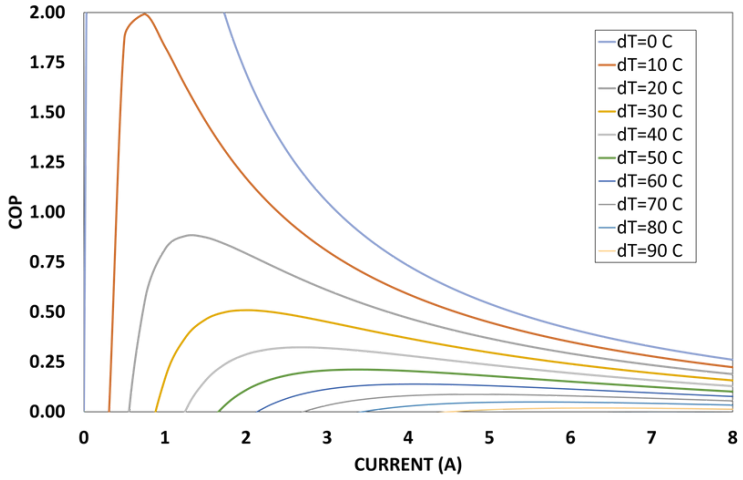
Current vs. Cooling Power



Current vs. Temperature Differential



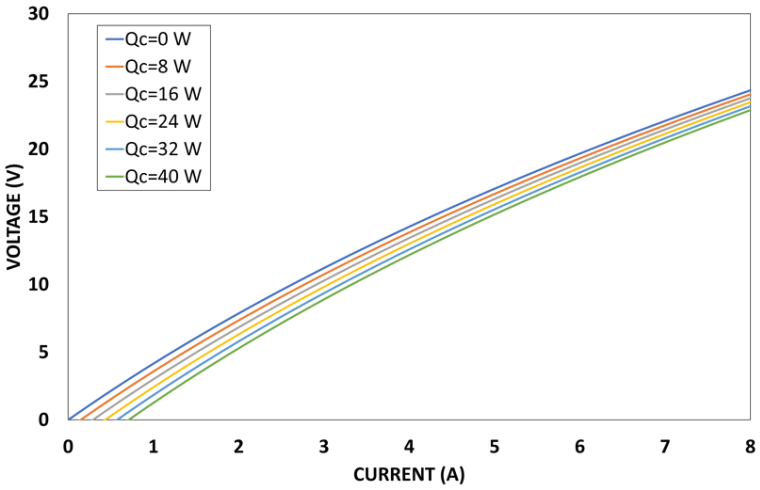
Current vs. COP



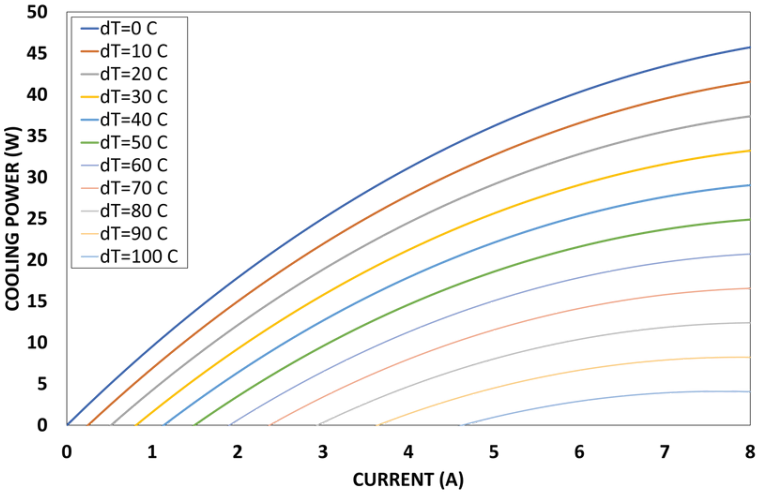
sheetak
Advanced Thermoelectrics

Performance curves at T_{hot} = 50°C

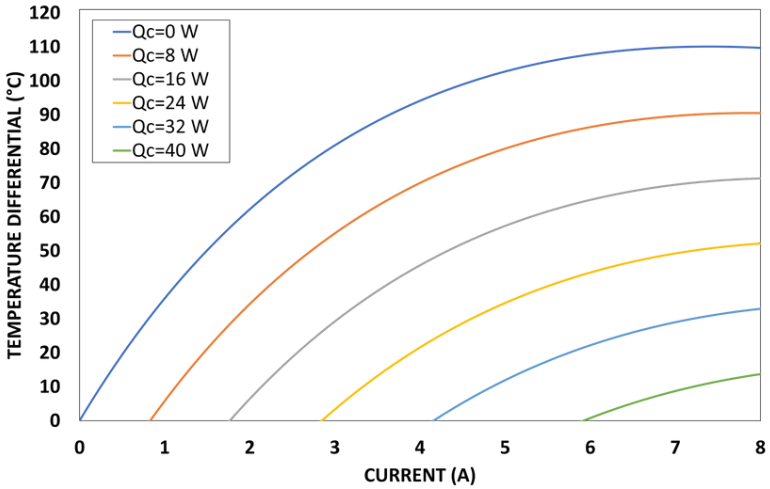
Current vs. Voltage



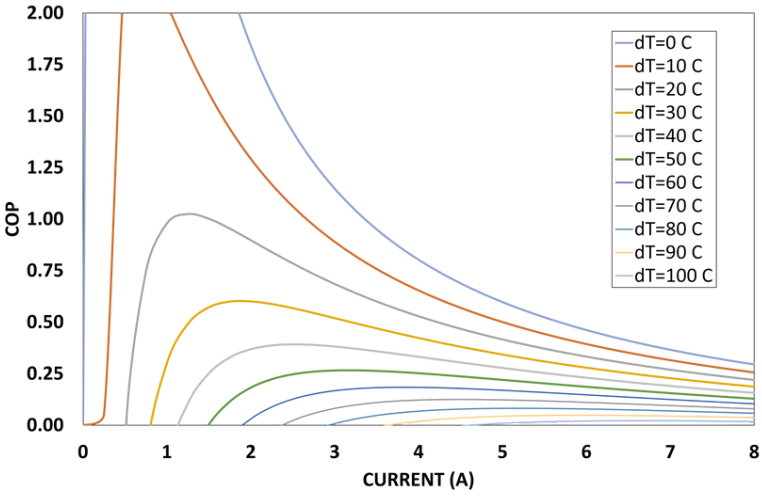
Current vs. Cooling Power



Current vs. Temperature Differential



Current vs. COP



sheetak
Advanced Thermoelectrics

Other Standard Two-Stage 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
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
C3-127-127-07	29x29x3.3	50	110.1	23.5	7.4	12.3	8
C3-238-238-07	40x40x3.7	50	110.1	44.1	7.4	23.0	17

sheetak
Advanced Thermoelectrics

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

www.sheetak.com

www.linkedin.com/company/sheetak/

info@sheetak.com

@SheetakAdvancedThermoelectrics

Buy Now

DigiKey www.digikey.com