

**MODEL:** CP147-4031-A | **DESCRIPTION:** PELTIER MODULE**FEATURES**

- arcTEC™ structure
- wide ΔT max
- precise temperature control
- low profile
- solid state construction
- silicone sealed option available

**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
input voltage ¹	Th = 27°C			26.3	V
	Th = 50°C			28.3	V
input current ²				14.7	A
internal resistance ³	Th = 27°C		1.45		Ω
	Th = 50°C		1.56		Ω
Q _{max} ⁴	Th = 27°C			240.7	W
	Th = 50°C			259.1	W
ΔT _{max} ⁵	Th = 27°C			74	°C
	Th = 50°C			83	°C
solder melting temperature	connection between thermoelectric pairs	240			°C
hot side plate				195	°C
cold side plate		-60			°C
assembly compression				0.34	MPa
RoHS	yes				

Notes: 1. Maximum voltage at ΔT max and $T_h = 27^\circ\text{C}$
2. Maximum current to achieve ΔT max
3. Measured by AC 4-terminal method at 25°C
4. Maximum heat absorbed at cold side occurs at I_{max} , V_{max} , and $\Delta T = 0^\circ\text{C}$
5. Maximum temperature difference occurs at I_{max} , V_{max} , and $Q = 0$ W (ΔT max measured in a vacuum at 1.3 Pa)
6. Tolerance for all thermal and electrical parameters is $\pm 10\%$.

PART NUMBER KEY**CP147 - 4031 - A X**

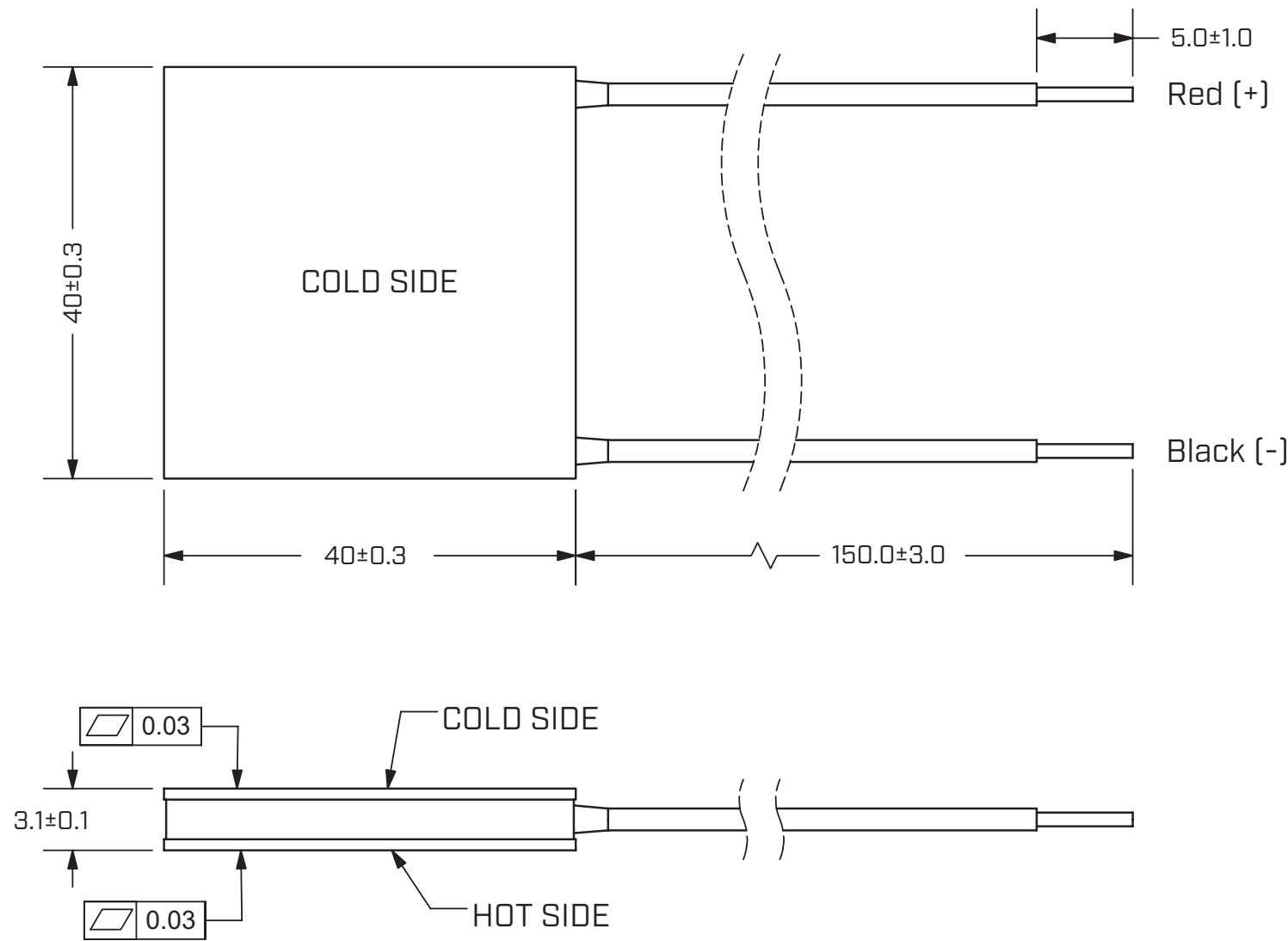
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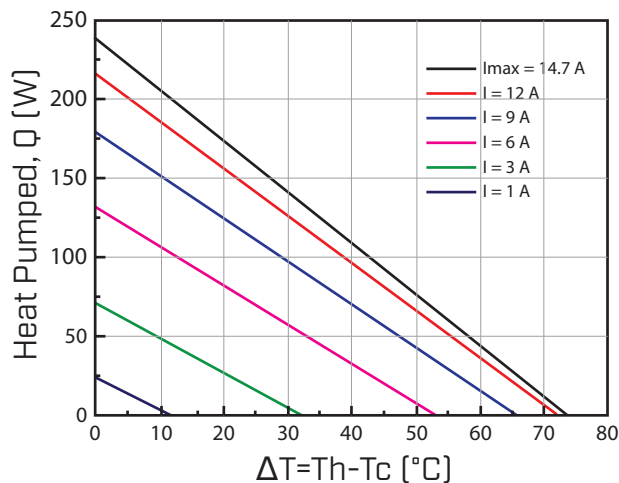
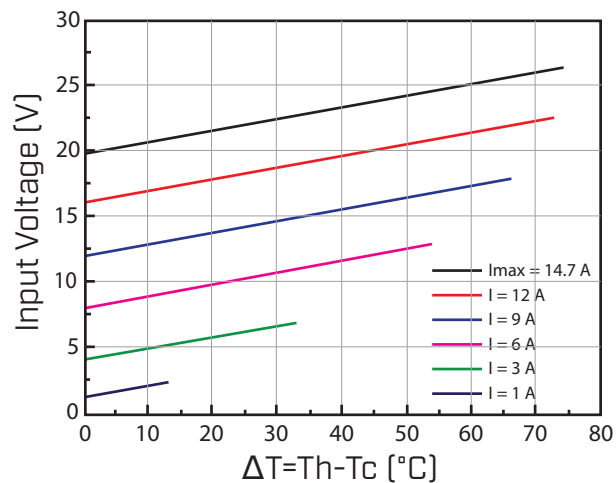
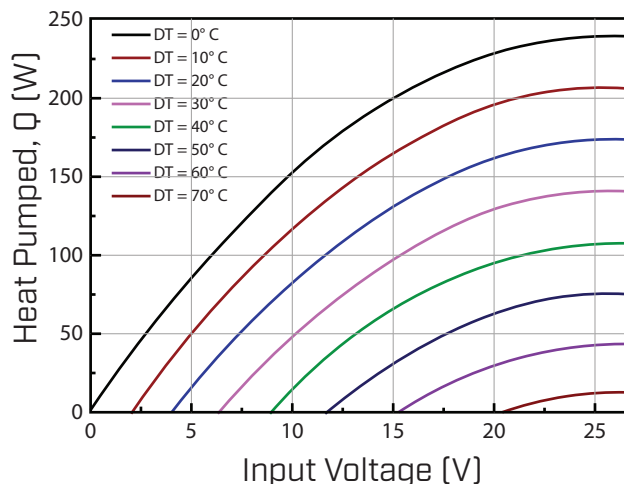
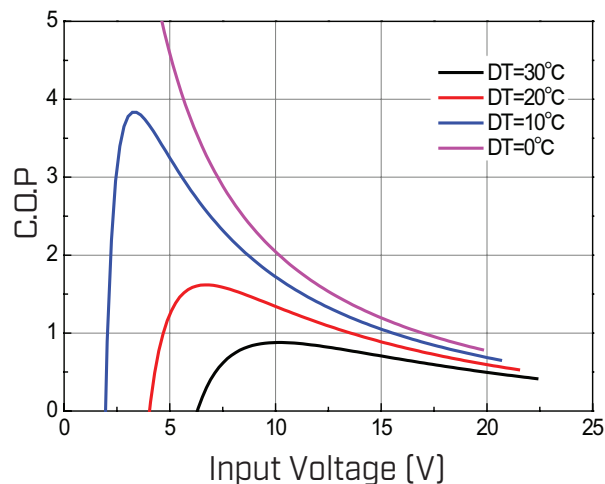
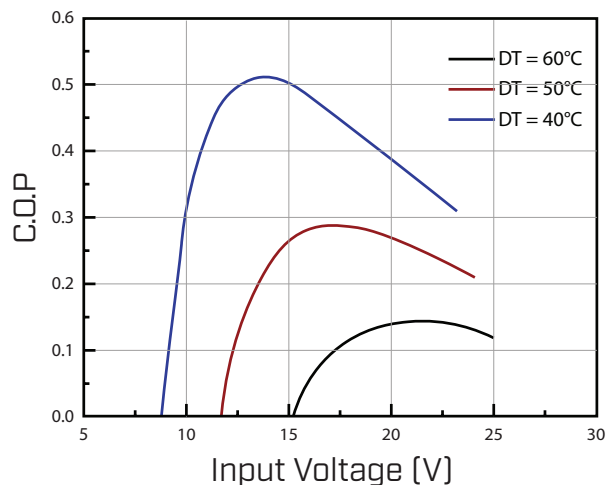
Silicone Sealed:
"blank" = not included
S = with silicone sealant

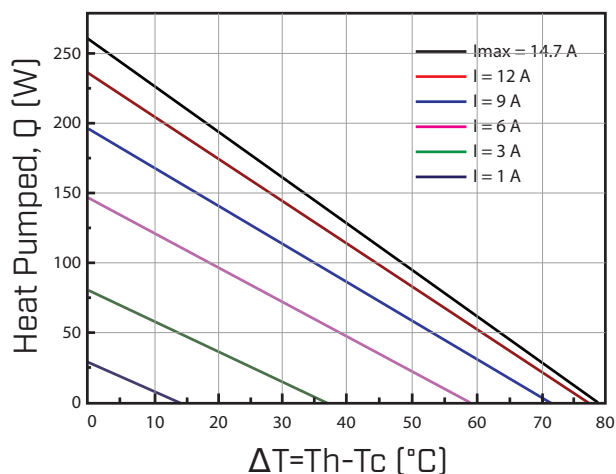
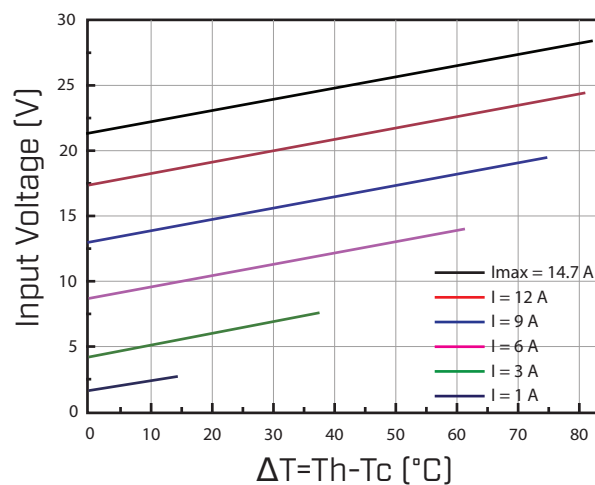
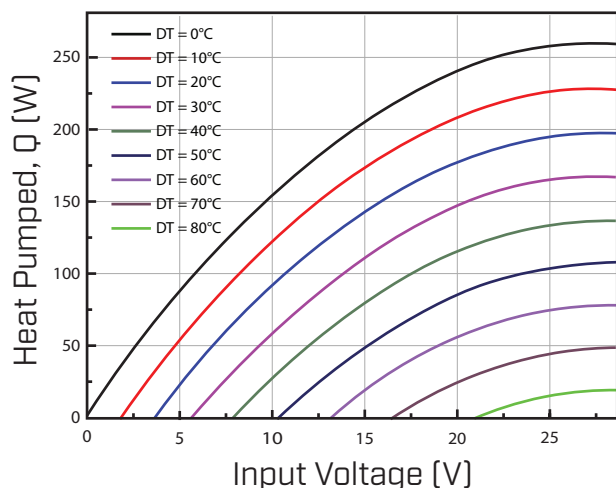
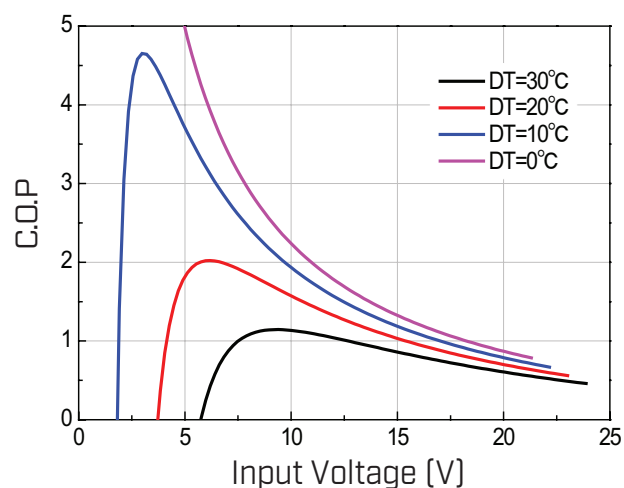
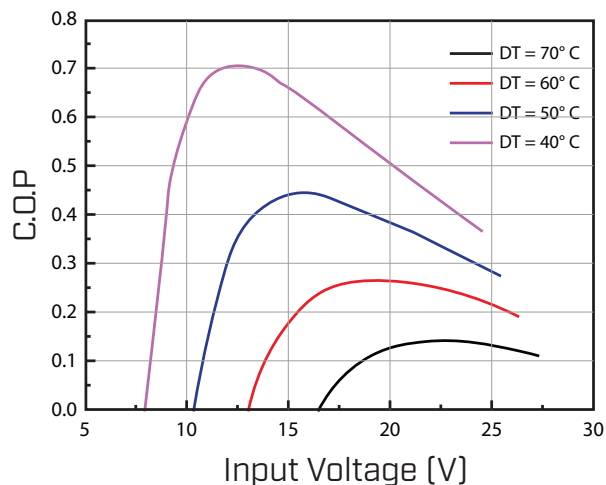
MECHANICAL DRAWING

units: mm

	MATERIAL	PLATING
ceramic plate	96% AL_2O_3	
wire leads	UL1726 18 AWG	tin
sealer (optional)	704 silicone sealant (between cold and hot side plates)	
marking	P/N printed on cold side surface	



PERFORMANCE (Th=27°C)**Heat Pumped, Q Vs. ΔT** **Input Voltage, V Vs. ΔT** **Heat Pumped, Q Vs. Input Voltage, V****COP Vs. Input Voltage, V ($\Delta T = 0 \sim 30^\circ\text{C}$)****COP Vs. Input Voltage, V ($\Delta T = 40 \sim 60^\circ\text{C}$)**

PERFORMANCE (Th=50°C)**Heat Pumped, Q Vs. ΔT** **Input Voltage, V Vs. ΔT** **Heat Pumped, Q Vs. Input Voltage, V****COP Vs. Input Voltage, V ($\Delta T = 0 \sim 30^\circ\text{C}$)****COP Vs. Input Voltage, V ($\Delta T = 40 \sim 70^\circ\text{C}$)**

REVISION HISTORY

rev.	description	date
1.0	initial release	07/24/2026

The revision history provided is for informational purposes only and is believed to be accurate.



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