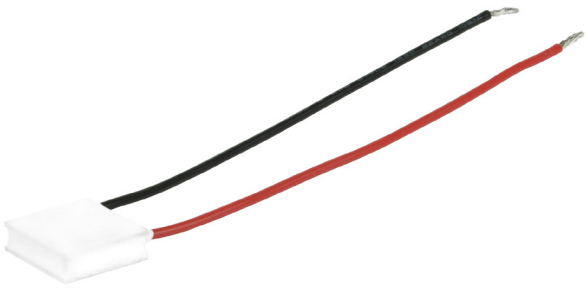
CUDEVICES

SERIES: CP20 | DESCRIPTION: PELTIER MODULE

FEATURES

- solid state device
- small and lightweight
- precise temperature control
- quiet operation



RoHS

MODEL

MODEL	input voltage[1] max (Vdc)	input current[2] max (A)	internal resistance[3] typ (Ω±10%)	output Qmax[4] T_h=27°C (W)	output Qmax[4] T_h=50°C (W)	output ΔTmax[5] T_h=27°C (°C)	output ΔTmax[5] T_h=50°C (°C)
CP20151	3.8	2	1.6	3.7	4.0	66	72
CP20251	8.6	2	3.5	8.5	9.4	66	72
CP20351	15.4	2	6.7	15.2	16.9	66	72

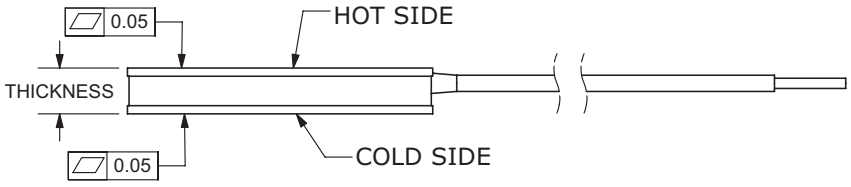
Notes:
1. Maximum voltage at ΔT max and T_h=27°C
2. Maximum current to achieve ΔT max
3. Measured by AC 4-terminal method at 25°C
4. Maximum heat absorbed at cold side occurs at I_{max}, V_{max}, and ΔT=0°C
5. Maximum temperature difference occurs at I_{max}, V_{max}, and Q=0W (ΔT max measured in a vacuum at 1.3 Pa)

SPECIFICATIONS

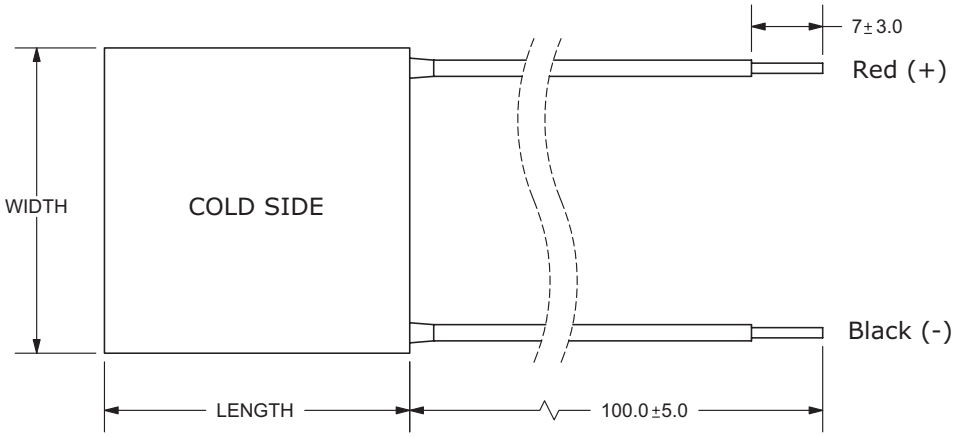
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	yes				

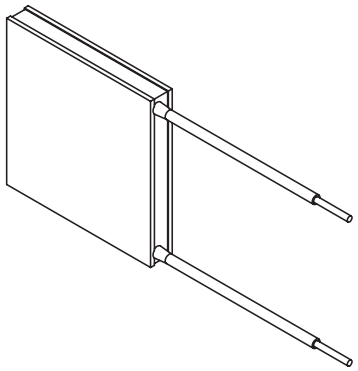
MECHANICAL DRAWING

units: mm



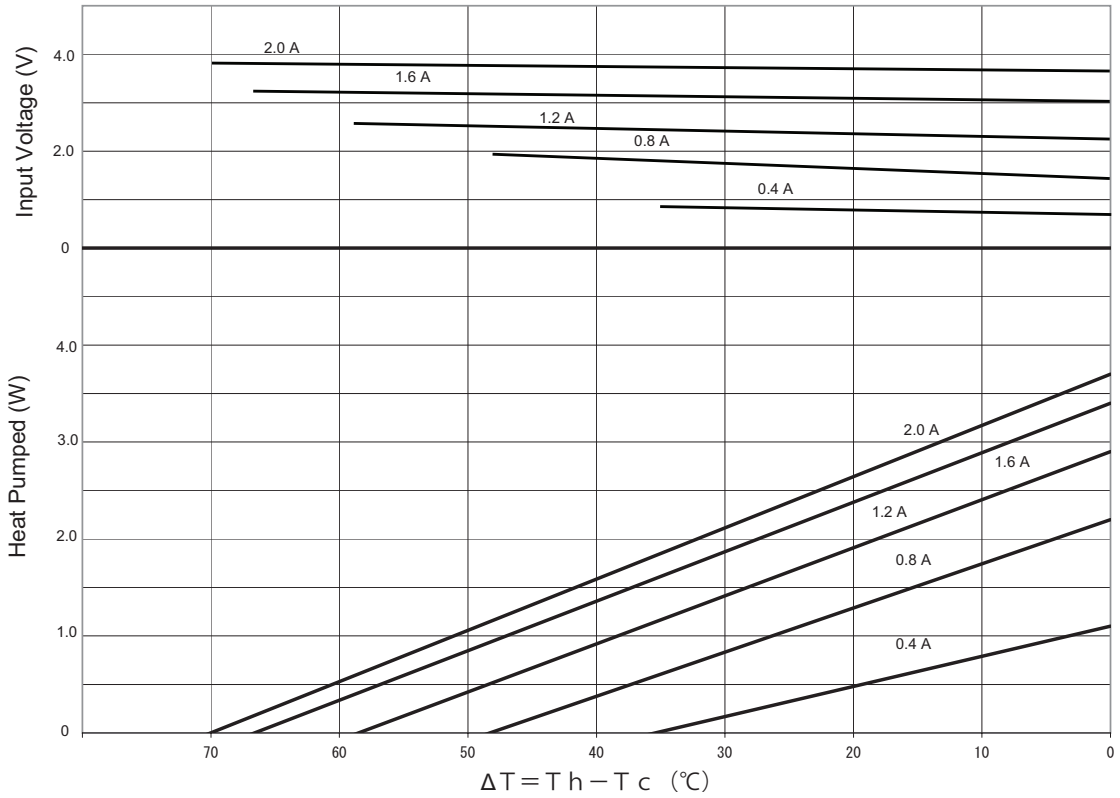
	MATERIAL	PLATING
ceramic plate	96% AL_2O_3	
wire leads	22 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	



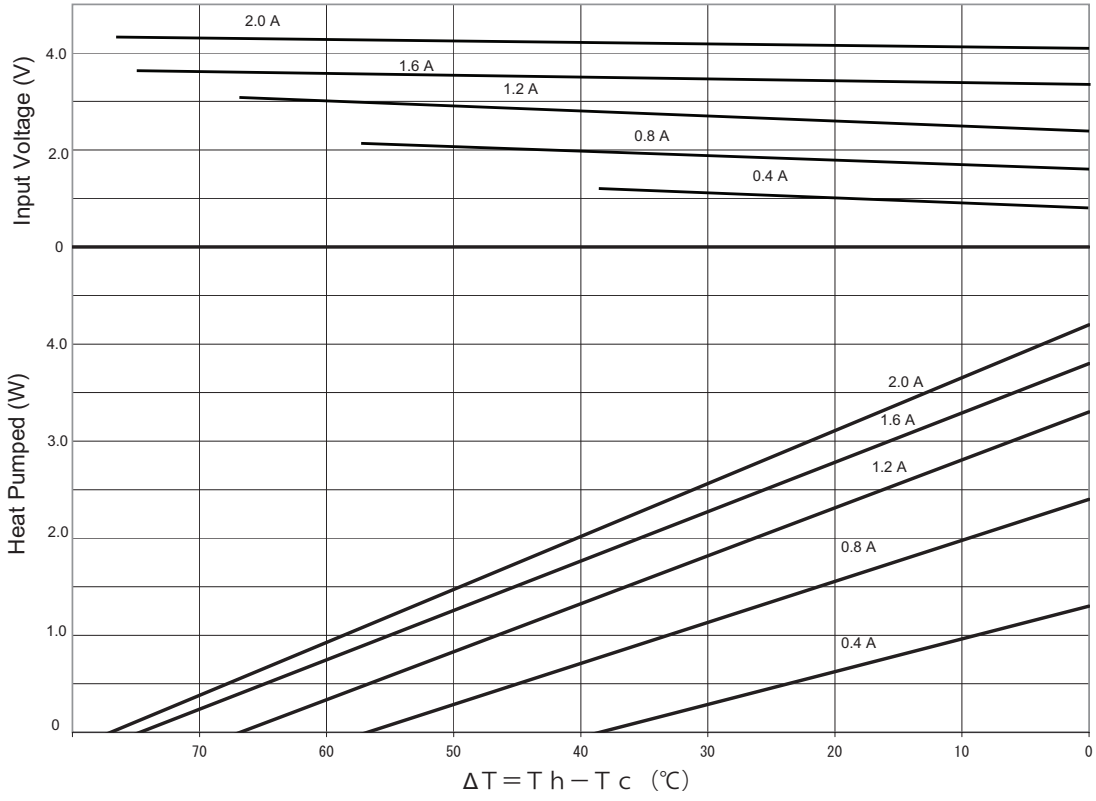


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP20151	15 ±0.3	15 ±0.3	5.02 ±0.1
CP20251	20 ±0.3	20 ±0.3	5.02 ±0.1
CP20351	30 ±0.3	30 ±0.3	5.02 ±0.1

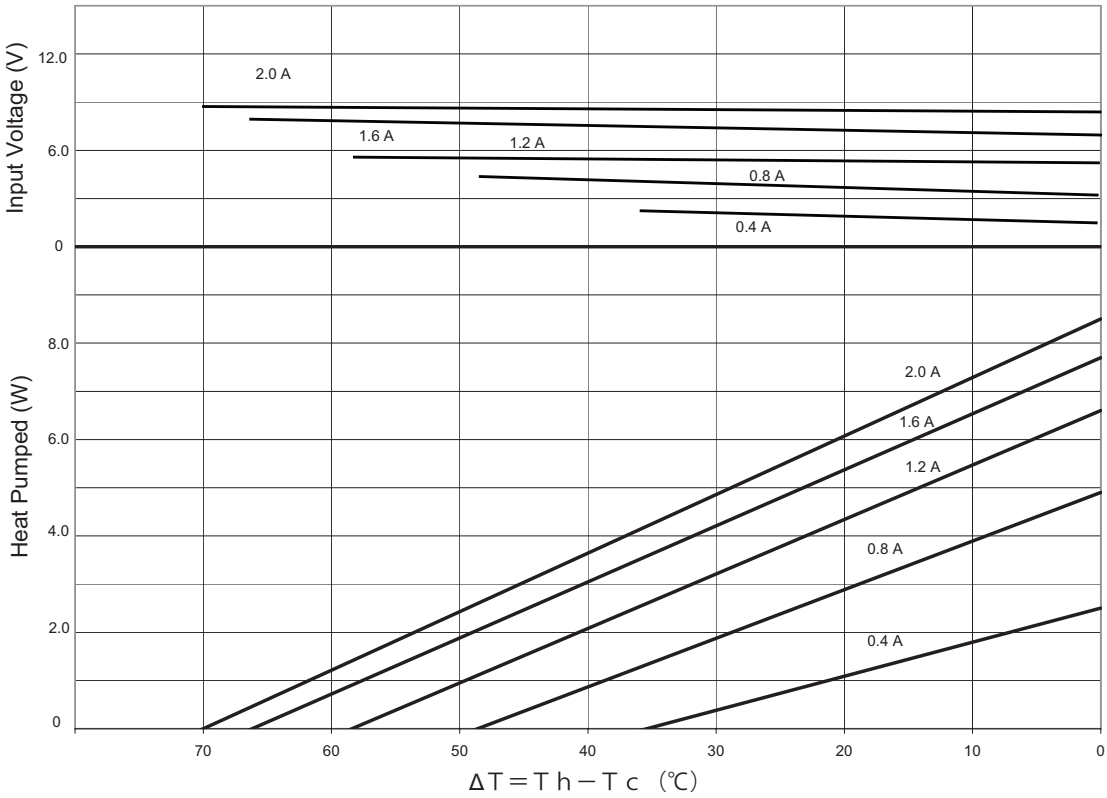
CP20151 PERFORMANCE (Th=27°C)



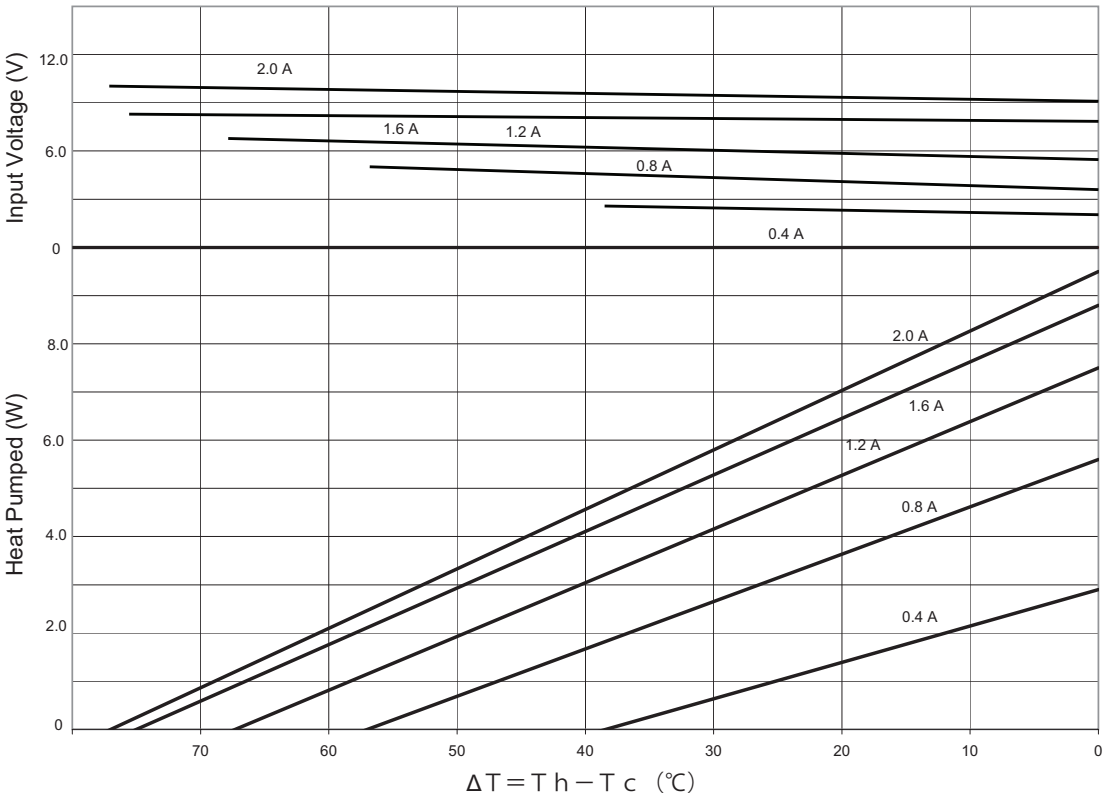
CP20151 PERFORMANCE (Th=50°C)



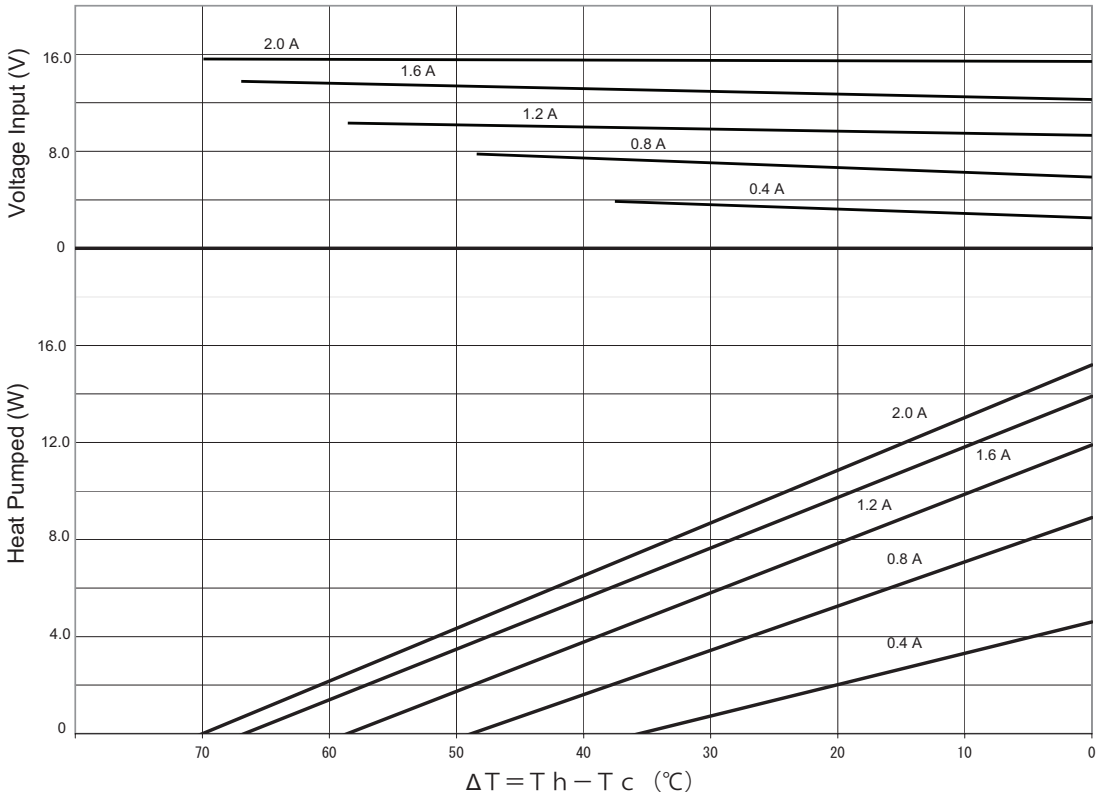
CP20251 PERFORMANCE (Th=27°C)



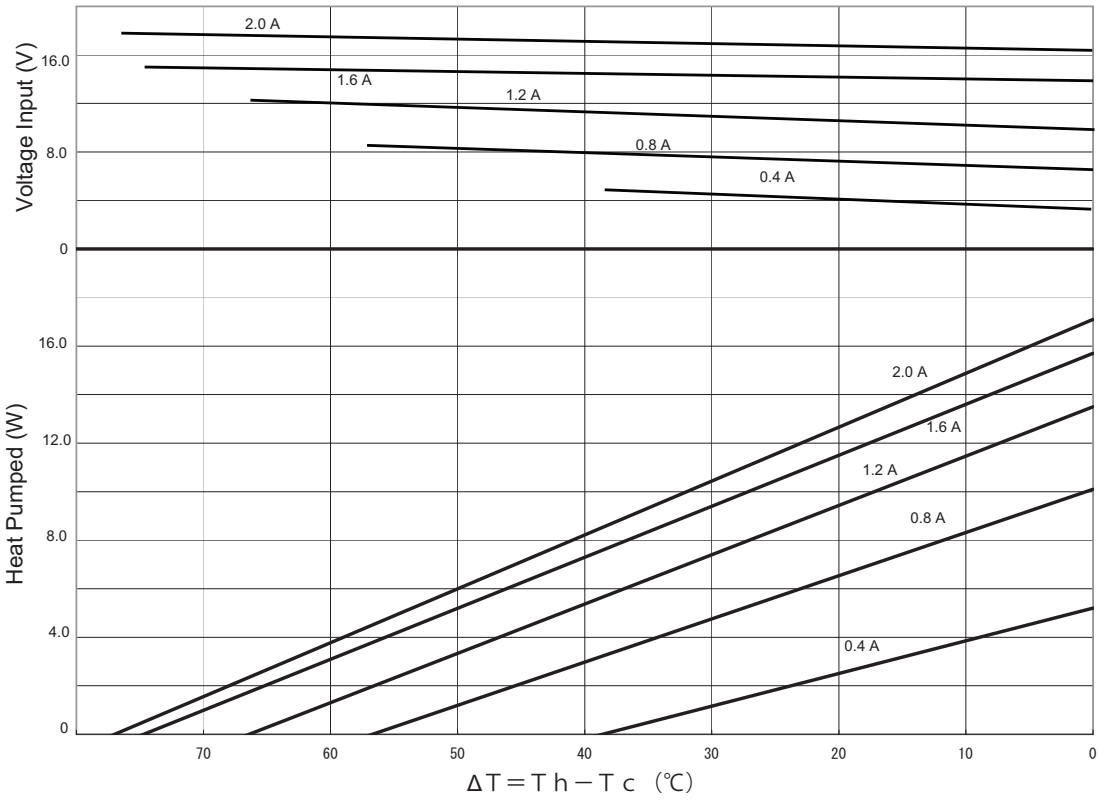
CP20251 PERFORMANCE (Th=50°C)



CP20351 PERFORMANCE (Th=27°C)



CP20351 PERFORMANCE (Th=50°C)



REVISION HISTORY

rev.	description	date
1.0	initial release	09/03/2009
1.01	applied new template	05/07/2012
1.02	changed thickness of all models	09/20/2018
1.03	brand update	10/28/2019
1.04	logo, datasheet style update	08/05/2022

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

CUI Devices offers a one (1) year limited warranty. Complete warranty information is listed on our website.

CUI Devices reserves the right to make changes to the product at any time without notice. Information provided by CUI Devices is believed to be accurate and reliable. However, no responsibility is assumed by CUI Devices for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI Devices products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

cuidevices.com

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

Same Sky:

PJ-067B CFM-2507CF-0140-313 CMA-4544PF-W CPI-1375IC-80T PJ-202AH CPT-1117-83-SMT-TR CFM-6015V-239-292-20 CMC-5042PF-AC SJ-2523-SMT-TR UJ32-C-H-G-L1-MSMT-TR DS01C-254-S-03BE PJ-047BH SJ1-3535N CDM1222-12A-FW-F16-050-67 CMI-9653S-SMT-TR CMP-5247TF-K DS04-254-2-02BK-SMT PR4-5V-450-1A TBL004V-508-02BE-2GY CFM-A238BF-270-651 HSE-B20350-NP PJ-058AH TB007-508-02BE CMM-2718AT-42316-TR CPM-2H SJ-43516-SMT-TR-PI TBP02P1-381-10BE TBP01R1-508-14BE CBT-09427-SMT-TR CFM-2510B-0130-275