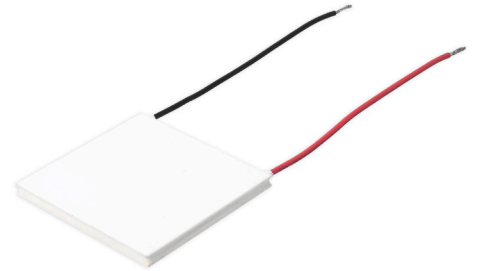




SERIES: CP180 | DESCRIPTION: PELTIER MODULE

FEATURES

- arcTEC™ structure
- enhanced reliability for high thermal cycling
- superior thermal performance
- silicon sealed
- wide ΔT max
- precise temperature control
- solid state construction



MODEL

	input voltage ¹	input current ²	internal resistance ³	output Qmax ⁴		output ΔT max ⁵	
	max [Vdc]	max [A]	typ [$\Omega \pm 10\%$]	$T_h = 27^\circ\text{C}$ [W]	$T_h = 50^\circ\text{C}$ [W]	$T_h = 27^\circ\text{C}$ [$^\circ\text{C}$]	$T_h = 50^\circ\text{C}$ [$^\circ\text{C}$]
CP185039	15.4	18	0.66	157	172	68	75

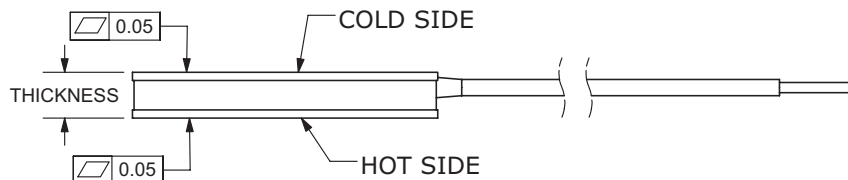
Notes: 1. Maximum voltage at ΔT max and $T_h = 27^\circ\text{C}$
 2. Maximum current to achieve ΔT max
 3. Measured by AC 4-terminal method at 25°C
 4. Maximum heat absorbed at cold side occurs at I_{max} , V_{max} , and $\Delta T = 0^\circ\text{C}$
 5. Maximum temperature difference occurs at I_{max}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

SPECIFICATIONS

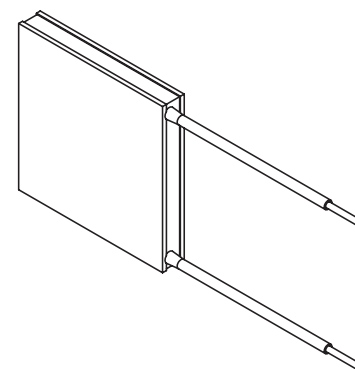
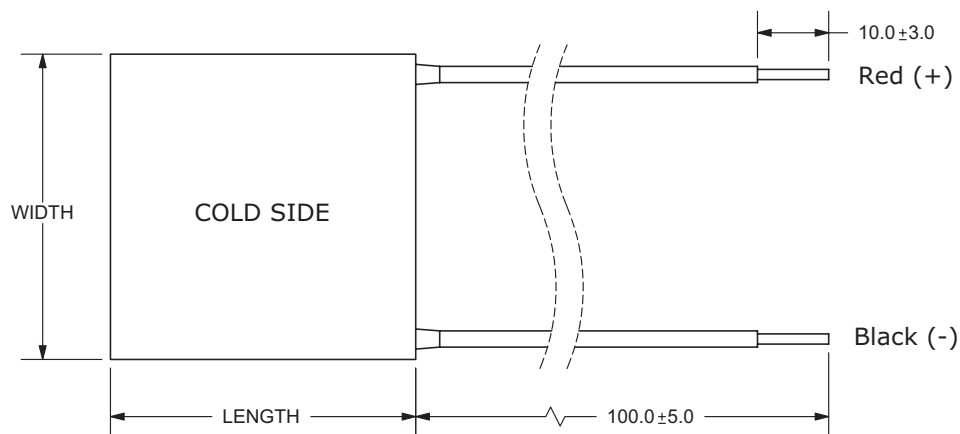
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
RoHS	yes				

MECHANICAL DRAWING

units: mm

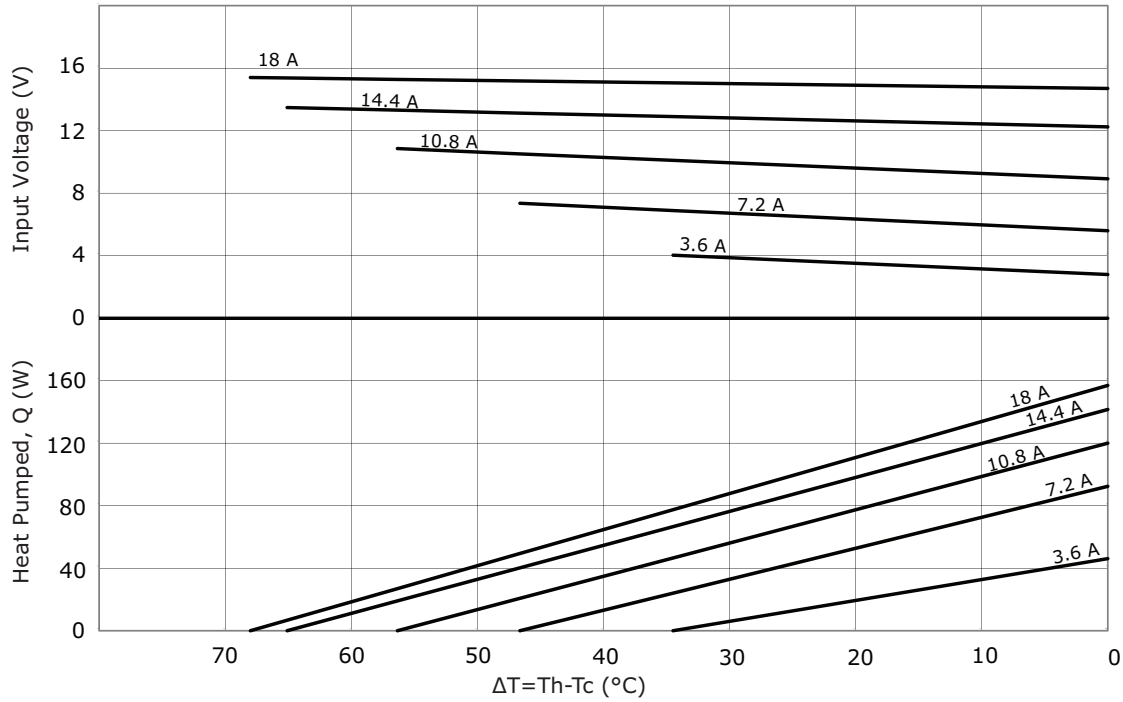


	MATERIAL	PLATING
ceramic plate	96% Al_2O_3	
wire leads	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

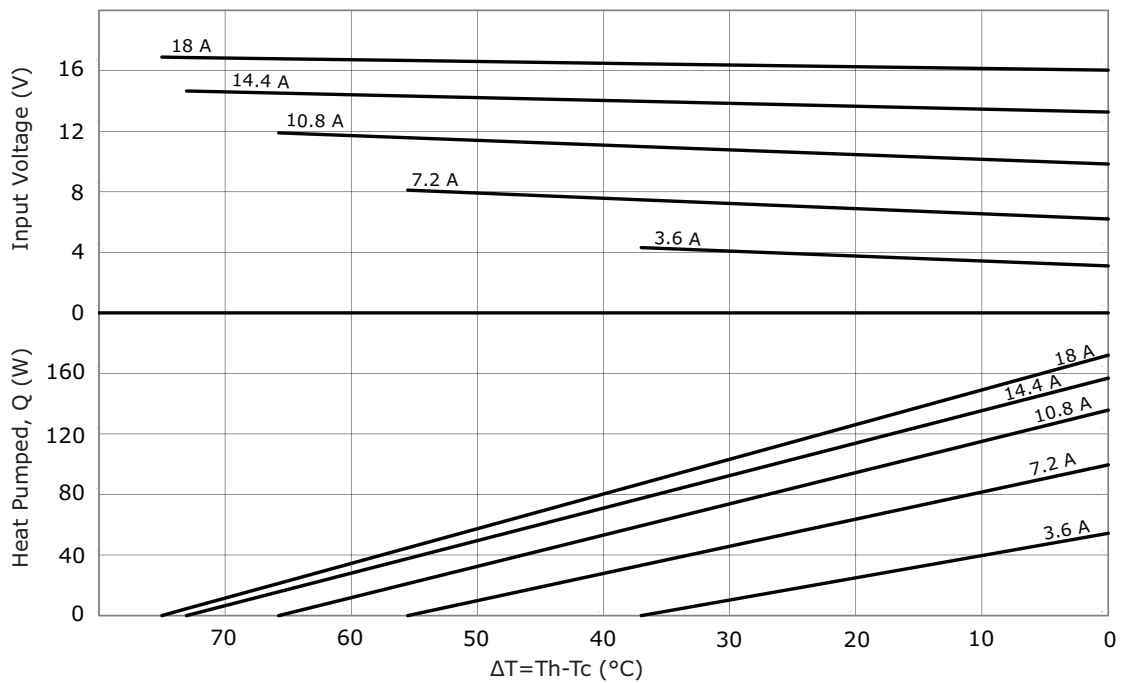


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP185039	50 ± 0.3	50 ± 0.3	3.9 ± 0.025

CP185039 PERFORMANCE (Th=27°C)



CP185039 PERFORMANCE (Th=50°C)



REVISION HISTORY

rev.	description	date
1.0	initial release	10/17/2019
1.01	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.

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