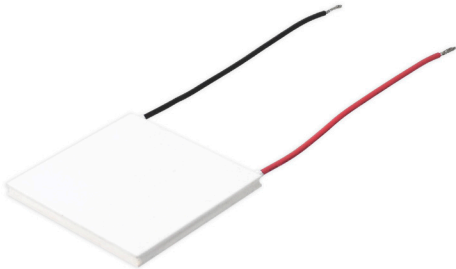


SERIES: CP180 | DESCRIPTION: PELTIER MODULE

FEATURES

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



MODEL

MODEL	input voltage ¹ max (Vdc)	input current ² max (A)	internal resistance ³ typ ($\Omega \pm 10\%$)	output Qmax ⁴		output ΔT max ⁵	
				T _h =27°C (W)	T _h =50°C (W)	T _h =27°C (°C)	T _h =50°C (°C)
CP185039	15.4	18	0.66	157	172	68	75

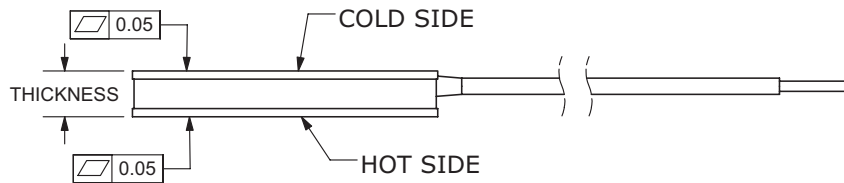
- Notes:
1. Maximum voltage at ΔT max and T_h=27°C
 2. Maximum current to achieve ΔT max
 3. Measured by AC 4-terminal method at 25°C
 4. Maximum heat absorbed at cold side occurs at I_{max}, V_{max}, and $\Delta T=0^{\circ}\text{C}$
 5. Maximum temperature difference occurs at I_{max}, V_{max}, and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

SPECIFICATIONS

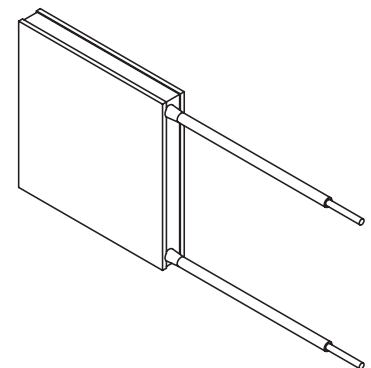
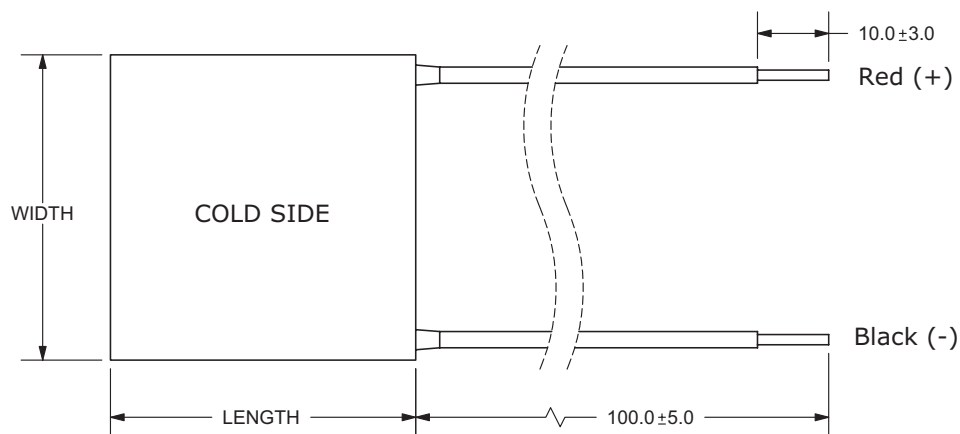
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
RoHS	yes				

MECHANICAL DRAWING

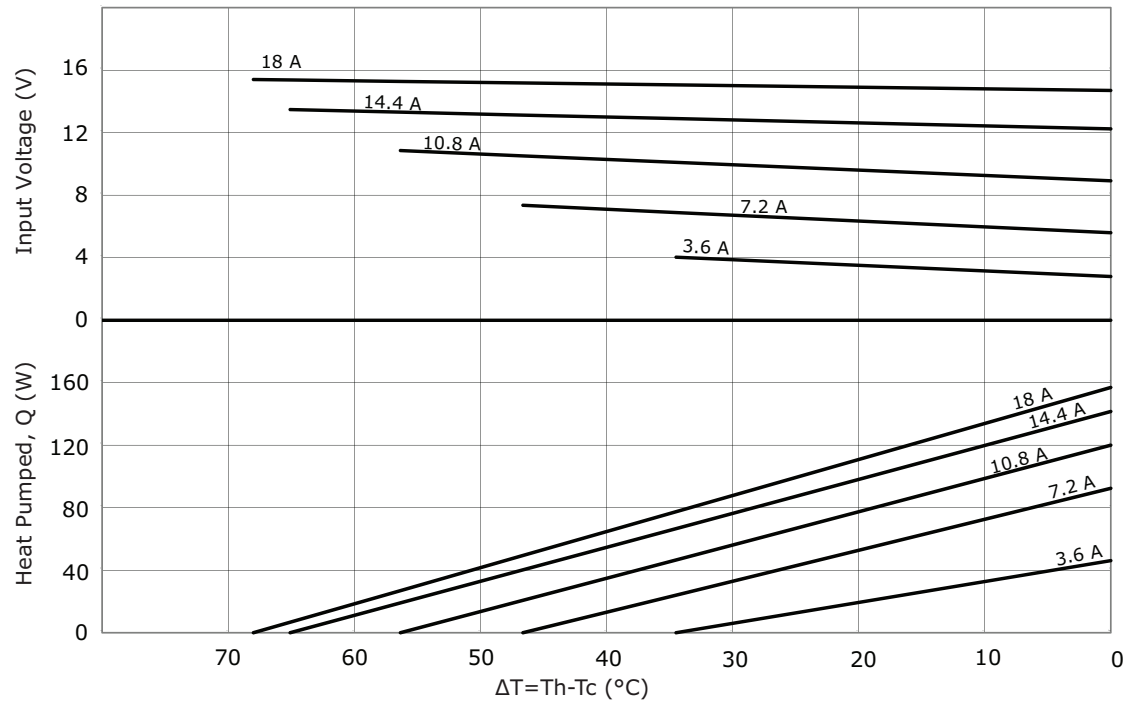
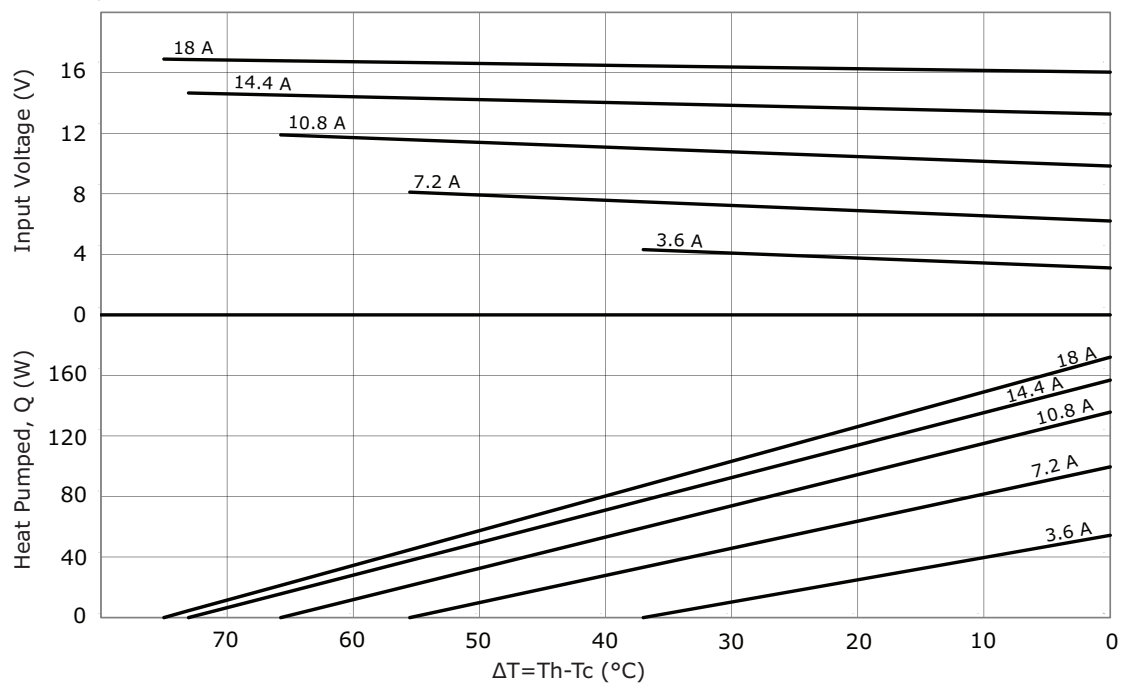
units: mm



	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

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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