

date 08/05/2022

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SERIES: CP180 | DESCRIPTION: PELTIER MODULE

FEATURES

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





MODEL	input	input	internal	output		output	
	voltage¹	current²	resistance³	Qmax⁴		∆Tmax⁵	
	max	max	typ	T _h =27°C	T _h =50°C	T_h=27°C	T _h =50°C
	(Vdc)	[A]	[Ω±10%]	(W)	(W)	(°C)	(°C)
CP185039	15.4	18	0.66	157	172	68	75

Notes:

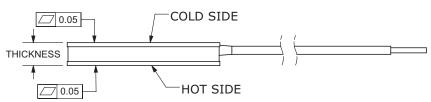
- 1. Maximum voltage at ΔT max and T_h =27°C 2. Maximum current to achieve ΔT max
- 3. Measured by AC 4-terminal method at 25°C
- 4. Maximum heat absorbed at cold side occurs at I_{max} , V_{max} , and $\Delta T=0^{\circ}C$ 5. Maximum temperature difference occurs at I_{max} , V_{max} , and Q=DW (ΔT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

SPECIFICATIONS

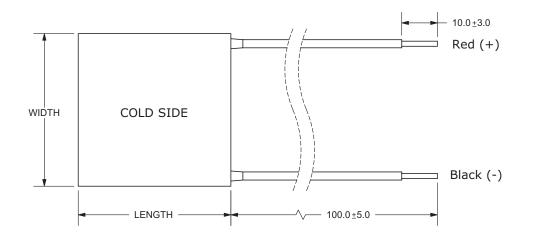
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
RoHS	yes				_

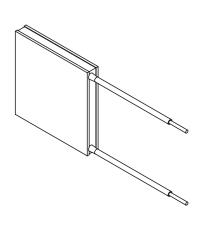
MECHANICAL DRAWING





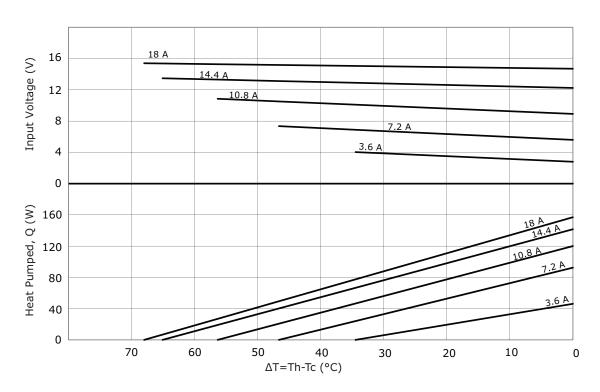
	MATERIAL	PLATING
ceramic plate	96% AL ₂ O ₃	
wire leads	20 AWG	tin
sealer	silicon rubber 703 R hot side plates)	TV (between cold and
joint cover	silicon rubber 703 R	TV
marking	P/N & S/N printed o	n cold side surface



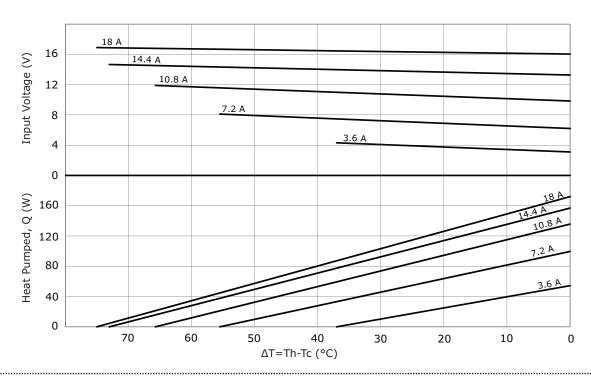


MODEL NO.	LENGTH	WIDTH	THICKNESS
	(mm)	(mm)	(mm)
CP185039	50 ±0.3	50 ±0.3	3.9 ±0.025

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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