# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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#### SERIES: CP35 **DESCRIPTION:** PELTIER MODULE

#### **FEATURES**

- solid state device
- precise temperature control
- quiet operation



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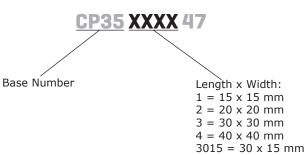


MODEL	input voltage <sup>1</sup>	input current <sup>2</sup> max (A)	output Omax <sup>3</sup>		output ∆Tmax⁴	
	max (Vdc)		T <sub>h</sub> =27°C (W)	T <sub>h</sub> =50°C (W)	<b>T<sub>h</sub>=27°C</b> (°C)	T <sub>h</sub> =50°C (°C)
CP35147	2.1	3.5	3.9	4.3	68	75
CP35247	3.8	3.5	7.0	7.7	68	75
CP35301547	4.2	3.5	7.9	8.7	68	75
CP35347	8.6	3.5	16.0	17.8	68	75
CP35447	15.4	3.5	29.0	32.0	68	75

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1. Maximum voltage at  $\Delta T \max_{h=2}^{1} < C$ 2. Maximum current to achieve  $\Delta T \max$ 3. Maximum heat absorbed at cold side occurs at  $I_{max'} V_{max'}$  and  $\Delta T=0^{\circ}C$ 4. Maximum temperature difference occurs at  $I_{max'} V_{max'}$  and Q=0W ( $\Delta T \max$  measured in a vacuum at 1.3 Pa)

#### **PART NUMBER KEY**



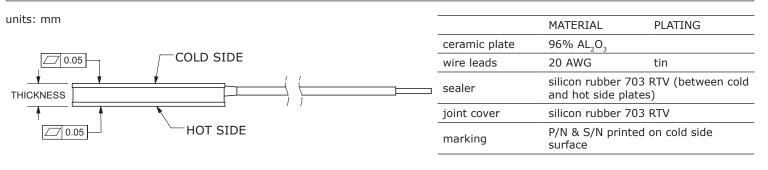
#### **SPECIFICATIONS**

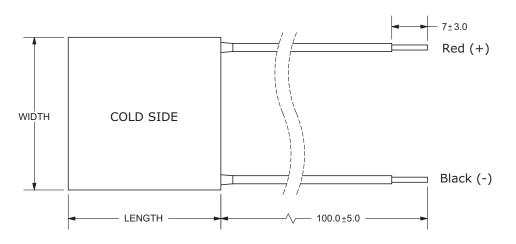
parameter	conditions/description	min	typ	max	units
	CP35147	0.396	0.44	0,484	Ω
	CP35247	0.72	0.8	0.88	Ω
internal resistance <sup>1</sup>	CP35301547	0.81	0.90	0.99	Ω
	CP35347	1.737	1.93	2.123	Ω
	CP35447	2.97	3.3	3.63	Ω
solder melting temperature	connection between thermoelectric pairs	138			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	2011/65/EU				

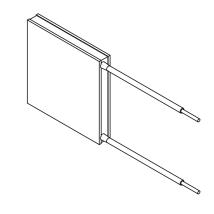
Note: 1. Measured by AC 4-terminal method at 25°C

#### **MECHANICAL DRAWING**

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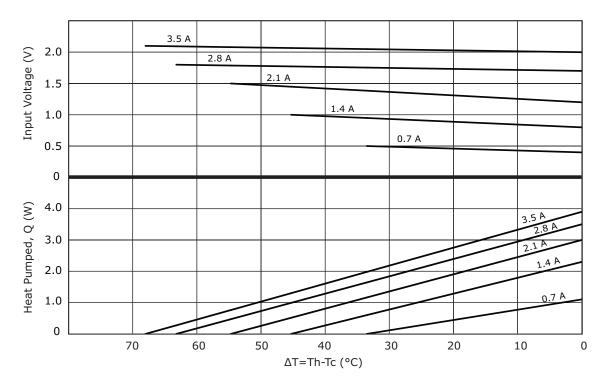




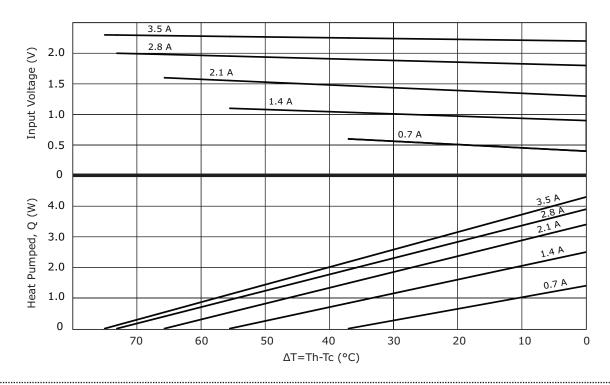


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP35147	15 ±0.3	15 ±0.3	4.7 ±0.1
CP35247	20 ±0.3	20 ±0.3	4.7 ±0.1
CP35301547	30 ±0.3	15 ±0.3	4.7 ±0.1
CP35347	30 ±0.3	30 ±0.3	4.7 ±0.1
CP35447	40 ±0.3	40 ±0.3	4.8 ±0.1

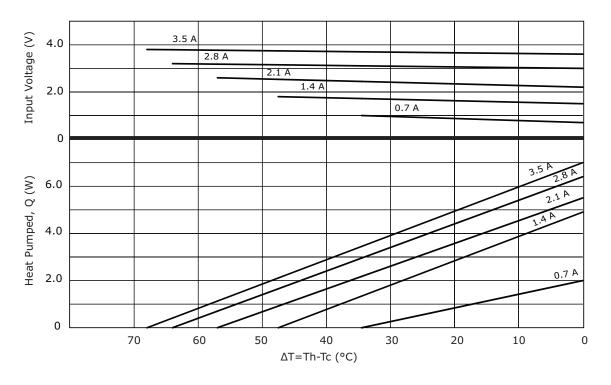
#### CP35147 PERFORMANCE (Th=27°C)



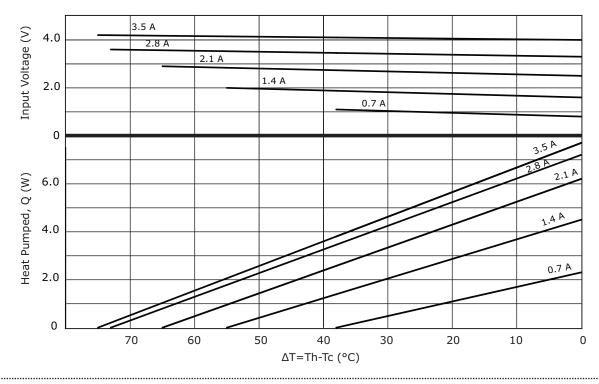
## CP35147 PERFORMANCE (Th=50°C)



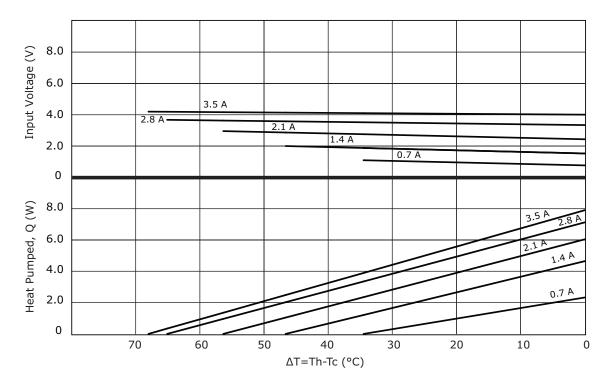
## CP35247 PERFORMANCE (Th=27°C)



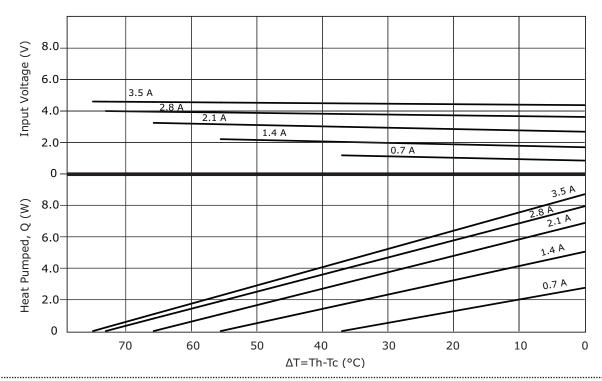
## CP35247 PERFORMANCE (Th=50°C)



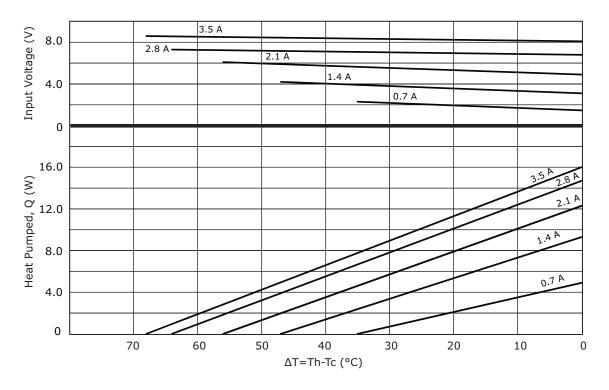
#### CP35301547 PERFORMANCE (Th=27°C)



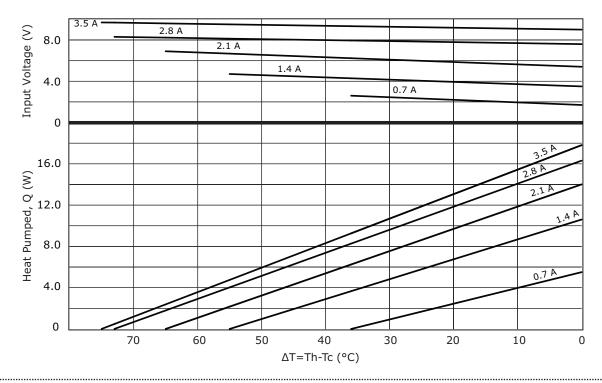
#### CP35301547 PERFORMANCE (Th=50°C)



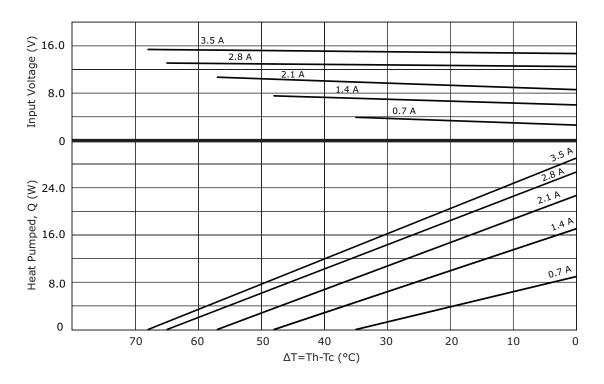
#### CP35347 PERFORMANCE (Th=27°C)



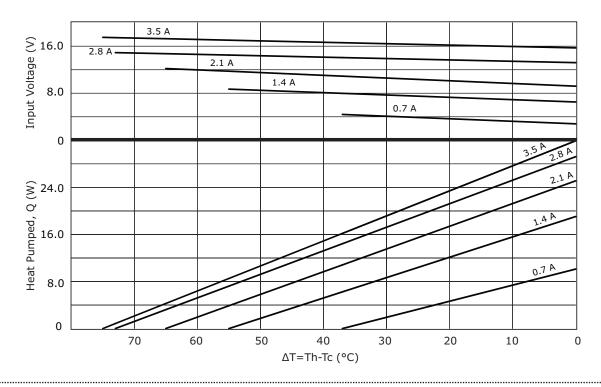
## CP35347 PERFORMANCE (Th=50°C)



## CP35447 PERFORMANCE (Th=27°C)



## CP35447 PERFORMANCE (Th=50°C)



#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	09/02/2016

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



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

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