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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!



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SERIES: CP30 | **DESCRIPTION:** 3.0 A PELTIER MODULE

FEATURES

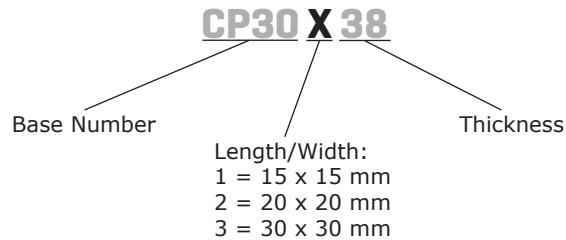
- solid state device
- small and lightweight
- precise temperature control
- quiet operation



| MODEL | input voltage max (V) | input current max (A) | output Qmax ¹ | | output ΔTmax ² | |
|---------|-----------------------|-----------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| | | | T _h =27°C (W) | T _h =50°C (W) | T _h =27°C (°C) | T _h =50°C (°C) |
| CP30138 | 3.8 | 3 | 6.5 | 7.2 | 66 | 72 |
| CP30238 | 8.6 | 3 | 15 | 16.7 | 66 | 72 |
| CP30338 | 15.4 | 3 | 27 | 30.1 | 66 | 72 |

Notes: 1. maximum cooling capacity at I_{max}, V_{max} and ΔT=0°C
 2. maximum temperature difference at I_{max}, V_{max} and Q=0W (maximum parameters are measured in a vacuum)

PART NUMBER KEY

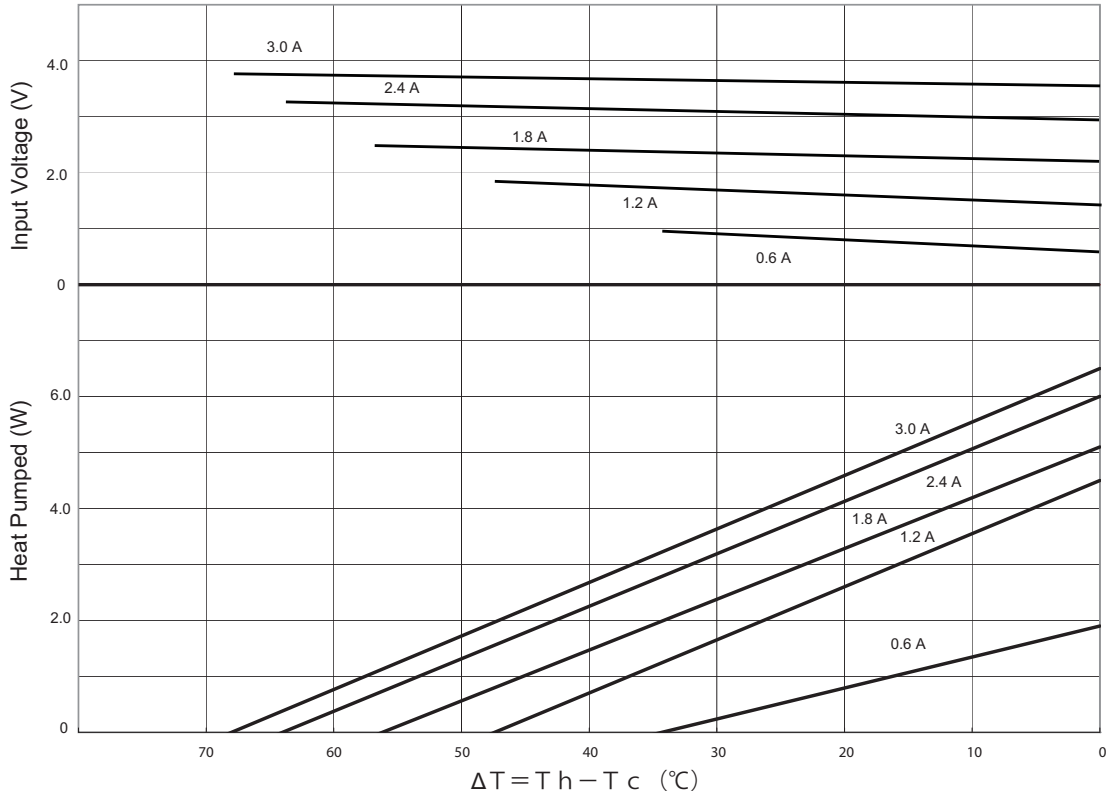


GENERAL

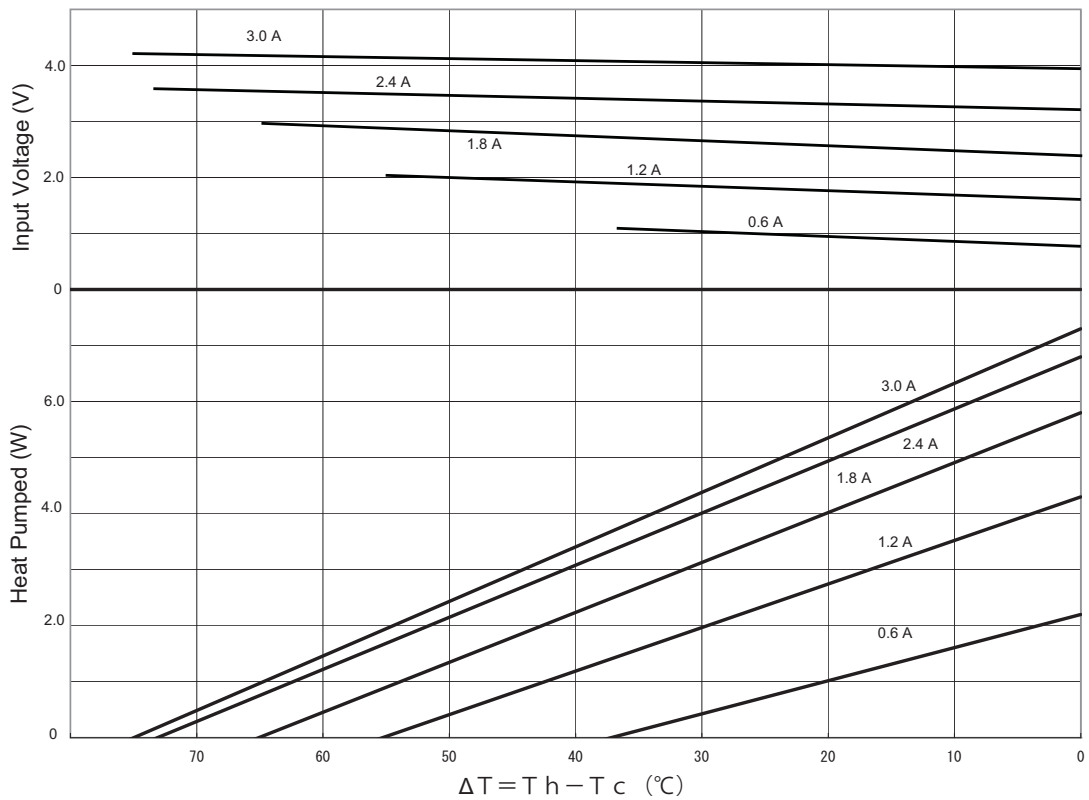
| parameter | conditions/description | min | typ | max | units |
|----------------------------------|---|------|-----|---------|---------------------|
| internal resistance ³ | CP30138 | 0.9 | 1.0 | 1.1 | Ω |
| | CP30238 | 2.07 | 2.3 | 2.53 | Ω |
| | CP30338 | 3.6 | 4.0 | 4.4 | Ω |
| solder melting temperature | connection between thermoelectric pairs | | | 138 | °C |
| assembly compression | | | | 98.07 | N/cm ² |
| | | | | 10 | kgf/cm ² |
| hot side plate | | | | 80 | °C |
| MTBF | | | | 200,000 | hours |

Notes: 3. measured by AC 4-terminal method at 25°C

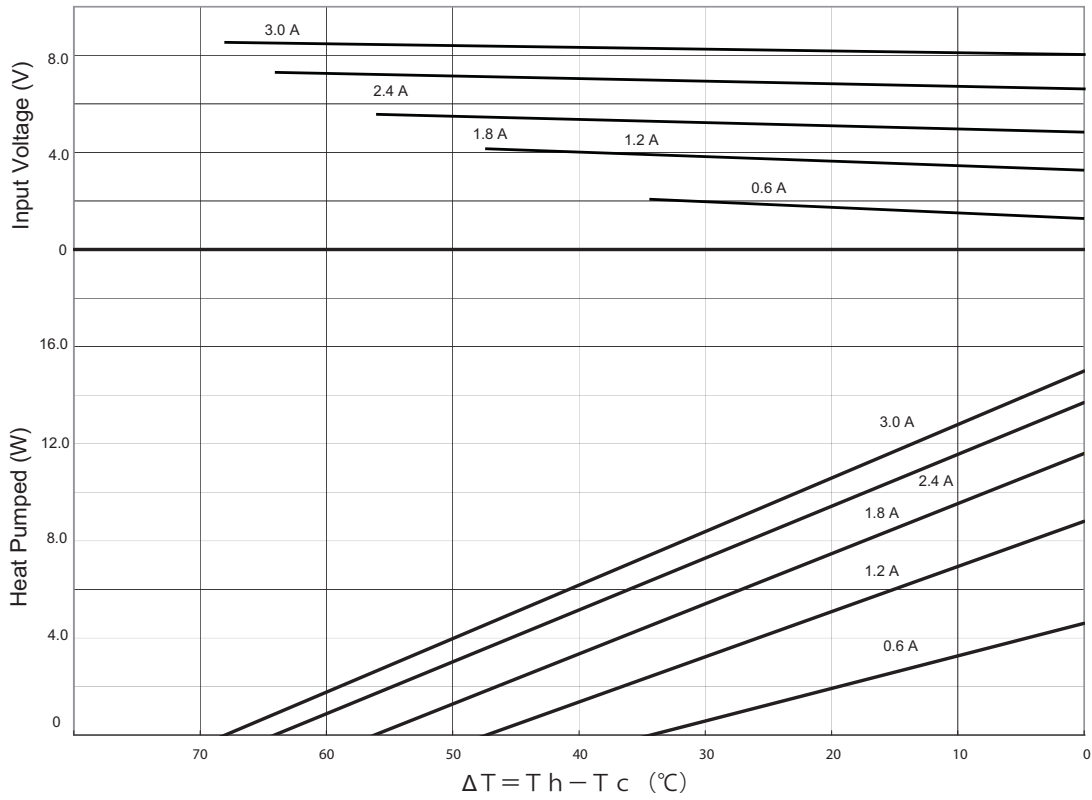
CP30138 PERFORMANCE (Th=27°C)



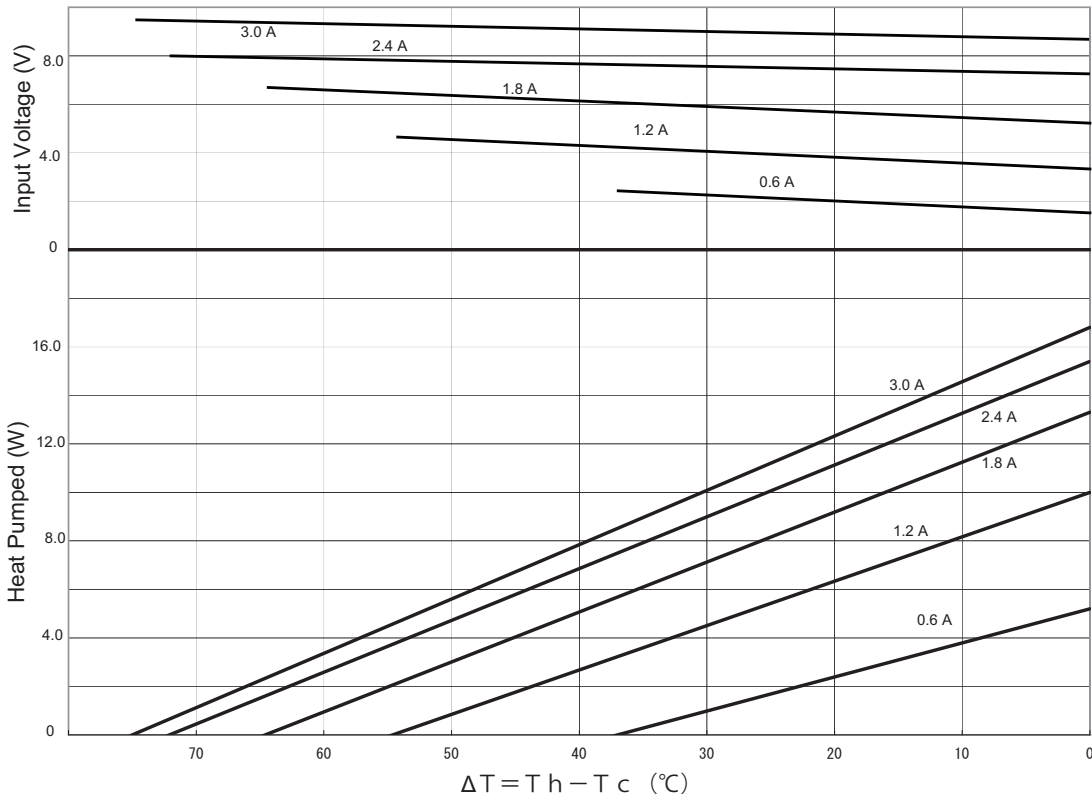
CP30138 PERFORMANCE (Th=50°C)



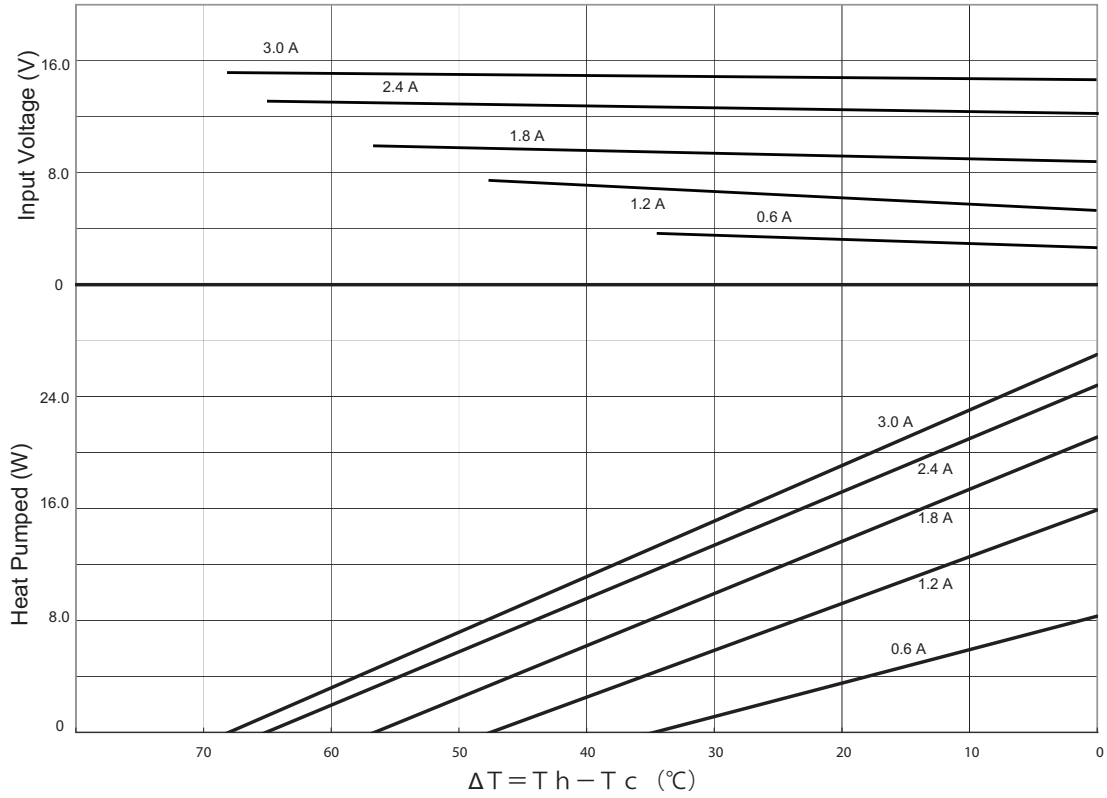
CP30238 PERFORMANCE (Th=27°C)



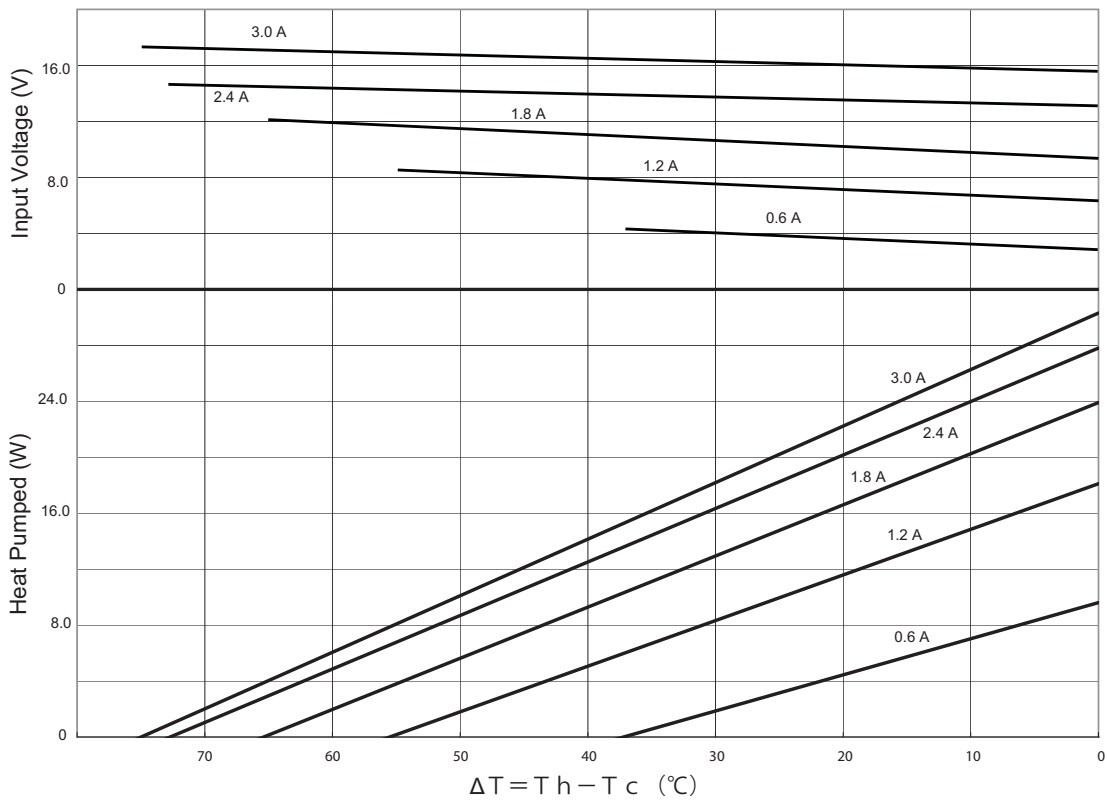
CP30238 PERFORMANCE (Th=50°C)



CP30338 PERFORMANCE (Th=27°C)

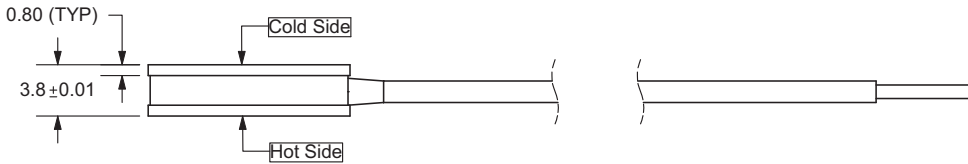


CP30338 PERFORMANCE (Th=50°C)

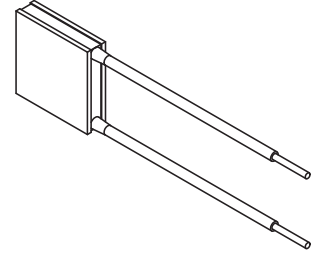
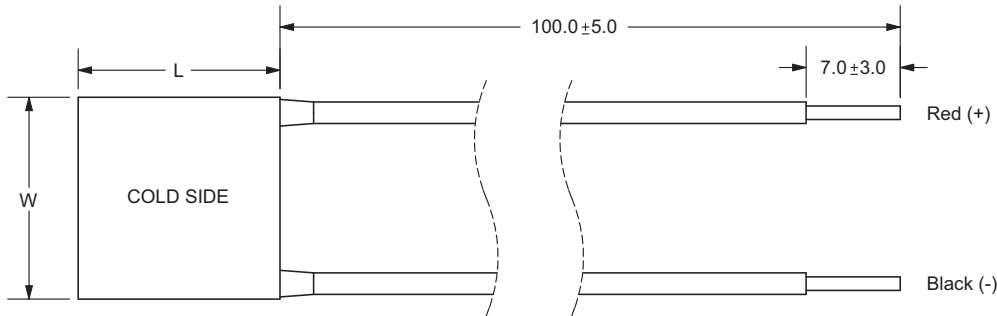


MECHANICAL DRAWING

units: mm



| | MATERIAL | PLATING |
|---------------|--|---------|
| ceramic plate | Al ₂ O ₃ (Alumina) | |
| sealer | silicon rubber RTV | |
| lead wire | UL1430 (22AWG) | tin |
| joint cover | silicon rubber RTV | |



| MODEL | LENGTH x WIDTH (mm) |
|---------|---------------------|
| CP30138 | 15 x 15 ±0.3 |
| CP30238 | 20 x 20 ±0.3 |
| CP30338 | 30 x 30 ±0.3 |

REVISION HISTORY

| rev. | description | date |
|------|----------------------|------------|
| 1.0 | initial release | 09/03/2009 |
| 1.01 | applied new template | 05/07/2012 |

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



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